



Supplement to:

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### **Field labels**

We hand-labeled fields but relied on a standard mutual information approach to identify phrases that best distinguished each cluster. Below we list the top phrases for each of 78 fields in the JSTOR corpus, with more than 1,000 papers total and 500 papers from 1990 to 2010. The 60 fields we chose for our final sample had at least 500 papers written from 1990 to 2010, were balanced across the major domains of scholarship in JSTOR, and were selected to maximize diversity within major domains (e.g., within ecology and evolution).

| Chosen Field Name      | Informative Phrases  |
|------------------------|--|
| 1 Strategic management | academy management, organizational, organizations, strategic management, research organizational, managers, organizational behavior, journal management, harvard business school, management journal, top management, strategic, firms, organizational change, organizational structure, firm, organizational performance, international business, industry, organization theory, management, industries, competitive advantage, management review, organizations action   |
| 2 Pollination ecology  | pollination, pollen, pollinators, flowers, flower, seed set, number flowers, pollinator, pollinated, nectar, stigmas, bees, anthers, outcrossing, floral, fruit set, pollen grains, breeding system, seed production, flowering, pollination ecology, selfing, ovules, number pollen, inbreeding depression, breeding systems, pollen transfer, flowers visited, flowering plants, stigma, pollen dispersal, inflorescence, inflorescences, nectar production, open flowers, flowers produced, inbreeding, bee, number seeds, individual flowers, floral display, flowers open, corolla, amount pollen, hermaphroditic, pollination biology, pollinator visitation, fruit seed, bumblebees, male function, flowers plants, floral traits, flowering season, visitation, experimental pollination, seeds produced, pollen production, flowers had, fruit production, pollinator behavior, pollinator visits, selfed, pollinations, pollen flow, outcrossing rate, fruit, visit flowers, pollen deposition, flower number, floral morphology, seeds, pollen limitation, outcrossing rates, female function, anthesis, seed, variation floral, plant reproductive, s c h, principles pollination, anther, variation pollen, grains, pollen deposited, flowers pollinated, flowering period, plants, reproductive biology, pollen donors, ipomopsis aggregata, pollen tubes, flowers plant, pollen load, flowers have, nectar pollen, plant populations, number ovules, floral biology, hummingbirds, flowering phenology, flower visitors, set fruit, pollen tube growth, visitors, handbook experimental, mating system, pollination success, pollen tube, visitation rates, visiting flowers, pollinator limitation, visited flowers, flower production, flower size, dioecy, hummingbird pollination, natural populations, journal botany, pollination systems, visited, flower fruit, seeds fruit, bumble bees, effects pollen, van der pijl, c h barrett, effect pollen, inflorescence size, pollinator activity, insect visitors, stamens, pollen removal, plant, b charlesworth, sex allocation, seed number, stigmatic, evolution dioecy, evolution floral, bagged, outcrossed, floral visitors, pollinator attraction, c e jones, fruits |

## 3 US constitutional law

supreme court, constitutional, supreme, united states v, equal protection, judicial, court has, court, constitution, courts, first amendment, statute, constitutionality, supreme court has, fourteenth amendment, judicial review, v board, constitutional law, amendment, fourteenth, unconstitutional, justices, judiciary, due process, court held, justice, clause, accompanying text, constitutionally, judges, u pa l, doctrine, v city, federal courts, chief justice, pa l rev, court did, equal protection clause, statutes, legislative, constitutional rights, jurisprudence, court had, see supra note, mich l rev, framers, text accompanying notes, legal, see id, legislature, constitutional right, court have, liberty, criminal, concurring, brown v board, entitled, courts have, rights, civil rights, bill rights, court found, denial, court appeals, district court, see united states, protection clause, statutory, laws, dissent, common law, va l rev, free speech, prohibition, court upheld, lower courts, state law, citizens, civil, legislation, dissenting, rights act, adjudication, court rejected, violation, text accompanying note, congress, due process clause, brown v, congress has, enforce, lawyers, enforcement, see supra notes, american constitutional law, deference, duty, s ct, denied, jurisdiction, deny, separation powers, violate, united states supreme, speech, bill, provisions, litigation, constitutional interpretation, federal, citizen, federal court, civil rights act, appeals, individual rights, federalist, defendant, legislative history, judicial power, state action, majority opinion, congress had, upheld, court concluded, language, authority, governmental, court noted, plaintiffs, judgment, racial discrimination, u l rev, see infra notes, constitutionally protected, supra text accompanying, remedy, v united states, process clause, see infra note, attorney general, american constitutional, state courts, cases involving, federal government, court decisions, attorney, pursuant, constitutional protection, law school, federal law, struck, supreme court decisions, state federal, see supra text, opinion, supreme court held, prohibit, police, permissible, freedom speech, prohibited, lower court, counsel, discretion, states supreme court, jury, ucla l rev, affirmative, judge, see infra, constitutional provisions, board education, state court, american law, precedent, legal system, legislatures, federalism, denying, plaintiff, congressional power, uphold, power congress, exercise, enacted, court struck, refusing, public interest, defendants, fifth amendment, opinions, justify, strict scrutiny, obligation, powers, supreme court had, asserted, infra text accompanying, district, neutral principles, enactment, lawyer, hearing, article iii, harm, cornell l rev, federal judiciary, authorized, doctrinal, protection, conviction, claims, prosecution, amendments, court has been, rule law, criminal law, protections, judicial process, clauses, congress have, enforcing, crime, federal state, legislative power, protect, doctrines, legitimate, commentators have, refusal, burden, yale law, liberties, commentators, legitimacy, impermissible, minn l rev, congressional, fundamental rights, scrutiny, see supra, government, case law, lower federal, substantive due process, concurring opinion, see infra text, commerce clause, court stated, convicted, statutory interpretation, power regulate, amendment rights, inquiry, legislators, remedies, wis l rev, constitutional adjudication, protecting, merits, substantive due, warren court, court decided, federal district, wash l rev, moral, privilege, discrimination, federal statute, presumption, constitutional doctrine, court has held, consent, propriety, legal theory, amended, federal system, political,

- appeal, ordinance, constitutional theory, warren, court recognized, challenged, critical legal, political process, grounds, amendment right, state statute, judicial decisions, abuse, justification, objection, injunction, free exercise, officials, constitutional issues, senate, court refused, upholding, claim, principle, american legal, affirmative action, behalf, democracy distrust, litigants, decisionmaking, arguing, federal constitution, first amendment rights, judicially, declared, constitutional provision, mere, court relied, matters, morality, substantive, fourth amendment, burdens, procedural, lochner v new, district columbia, asserting, facts, refuse, strike, federal judges, federal constitutional, judicial role, mary l rev, intent, enact, judges have, appellate, calif l rev, proper, principles constitutional, political branches, protected, invalidation, court made, make law, court has never, decide, constitutional text, privacy, authorize, lower federal courts, privileges, principles, school law, deprive, least dangerous, critical legal studies, declare, discriminatory, dispute, fair, regulations, justice brennan, declaration, vote, insist, justice rehnquist, interests, justifications, speak, truth, court invalidated, ban, merely, construed, exercising, law has, words, compel, fairness, violating, defense, harvard law, premised, constitutional statutory
- 4 Portfolio theory  
portfolios, portfolio, asset pricing, asset pricing model, capital asset pricing, journal financial, capital asset, expected returns, stocks, expected return, stock market, market portfolio, journal finance, investor, financial quantitative, excess return, stock returns, investors, market equilibrium, asset returns, monthly returns, securities, fama, capm, excess returns, review financial, portfolio returns, common stocks, asset, stock prices, asset prices, risky assets, theory market, stock portfolios, riskless, returns, returns stocks, pricing model, mutual funds, portfolio selection, fama french, mutual fund, security prices, asset pricing models, risk premium, theory capital, new york stock, market index, betas, financial studies, financial economics, risk return, risk assets, selection risky, portfolios capital, equilibrium conditions
- 5 Marketing  
journal consumer, journal marketing, brands, brand, consumer research, association consumer, advances consumer, marketing, consumer behavior, product category, marketing research, consumer, consumers, brand choice, product categories, journal advertising, professor marketing, advertising, consumer decision, marketing research vol, product class, consumers have, consumer choice, subjects asked, product attributes, two brands, purchase, consumer research table
- 6 Lizard thermoregulation  
lizard, lizards, iguanid, body temperatures, iguanid lizard, body temperature, lizard species, reptiles, c gans, uta stansburiana, lizards have, species lizards, lizard sceloporus, lizard anolis, lizard uta stansburiana, lizard uta, svl, reptilia, anolis, amphibians reptiles, lizards collected, anolis lizards, iguanid lizards, thermal, thermoregulation, lizards snakes, anoline lizards, cnemidophorus tigris, desert reptiles, two lizards, lizards captured, amphibians, viviparous, sceloporus undulatus, preferred body, iguanid lizard sceloporus, e r pianka, basking, lizards had, anoles, number lizards, desert lizards, sceloporus occidentalis, reproductive cycles, thermal ecology, individual lizards, sceloporus

- 7 International relations international relations, international politics, international system, foreign policy, world politics, international studies quarterly, soviet union, soviet, cold war, journal conflict, domestic political, wars, domestic politics, international conflict, peace, military, conflict resolution, theory international, great powers, international studies, journal peace, use force, international political, nuclear weapons, study international, peace research, diplomacy, national security, major powers, nations, international, international organization, military power, balance power, allies, international relations theory, great power, major power, international security, international affairs, correlates war, american political science, bueno de mesquita, military force, international institutions, arms control, international studies association, international organizations, weapons, domestic international, world war, alliance, soviets, american foreign, nato, domestic, diplomatic, democracies, peaceful, go war, superpowers, political science, treaty, politics international, russia, escalation, united nations, democratic peace, actors, use military, political science review, germany, american foreign policy, outbreak, realist, military capabilities, foreign policies, governments, war peace, multilateral, de mesquita, security dilemma, theories international, troops, politics, superpower, third world, crisis, negotiations, international cooperation, j david singer, structure international, france, war change, foreign, international economic, cold, military forces, democratic states, causes war, world war ii, alliances, middle east, threats, international crises, change world, leaders, europe, department political, crises, fight
- 8 Phylogenetic inference evolutionary trees, phylogenetic inference, systematic biology vol, phylogenetic trees, phylogenetic, phylogenetic analysis, character states, phylogeny, parsimony, phylogenetic methods, character state, cladogram, phylogenetic relationships, phylogenetic systematics, homoplasy, monophyly, number characters, branch lengths, systematic zoology vol, parsimony compatibility, molecular data, outgroup, cladistic, phylogenetic analysis using, topologies, monophyletic, molecular clock, j s faris, phenetic, compatibility methods, topology, character weighting, r r sokal, characters, maximum parsimony, phylogenetic tree, data phylogenetic, d penny, cladistic analysis, tree topologies, tree topology, common ancestor
- 9 Plant-herbivore interactions insect herbivores, phytophagous insects, host plant, herbivorous insects, herbivores, host plants, herbivores natural, herbivore, secondary plant, plant chemistry, plants herbivores, chemical defense, evolution host, plant resistance, variable plants, natural enemies, secondary plant metabolites, managed systems, plant apparency, natural managed, herbivory, hosts, apparency chemical, host selection, insect, oviposition preference, secondary compounds, plant antiherbivore, insect herbivore, phytophagous, larval performance, plant quality, plant chemical, interaction secondary, insect herbivory, larvae, defense herbivores, oviposit, plant defenses, variation host, parasitoids, leaf tannins, leaf damage, caterpillars, host use, winter moth, oviposition, r f denno, study coevolution, insects, host preference, herbivore attack, foliage, tannins, polyphagous, host specificity, defoliation, resistance herbivores

## 10 Rainforest ecology

tropical rain forest, canopy gaps, tropical forests, tropical rain, tree species, rain forest, tropical forest, forest dynamics, saplings, regeneration, canopy trees, canopy, tropical rain forests, tropical tree, tropical trees, rain forests, forests, journal tropical, gap formation, treefall gaps, forest structure, barro colorado, basal area, tree seedlings, cm dbh, dbh, canopy gap, seedlings, rain forest tree, rain forest trees, understory, tree species diversity, canopy tree, forest, tropical ecology, shade tolerance, neotropical forest, natural disturbance, forest canopy, breast height, tropical tree species, light environment, n v l, forest trees, understory, light environments, seedlings saplings, tropical moist, gap dynamics, canopy openings, diameter breast, gap size, tropical, trees living, canopy species, tree mortality, tropical rainforest, neotropical rain, forest ecology, lowland tropical, tropical moist forest, neotropical rain forest, pioneer species, seedling, trees, seedling establishment, height growth, forest floor, barro colorado island, seedling survival, shade tolerant, neotropical tree, lowland rain forest, structure tropical, gaps tree, small gaps, light availability, disturbance patch, tropical forest dynamics, large gaps, partitioning tropical, neotropical, gap partitioning, emergent trees, floristic composition, gaps

## 11 Amphibial life history

tadpoles, metamorphosis, frogs, amphibian, ponds, anurans, pond, tadpole, embryos larvae, anuran embryos, staging anuran, table staging, staging anuran embryos, larvae notes, simplified table, notes identification, size metamorphosis, amphibian larvae, amphibians, salamanders, frog, salamander, amphibian populations, anuran larvae, wood frog, anuran, amphibian species, larval period, toads, larval, larval anurans, amphibian metamorphosis, anuran species, temporary ponds, larvae, metamorphose, bufo americanus, aspects amphibian, rana pipiens, rana sylvatica, complex life cycles, ambystoma, breeding ponds, larval anuran, rana, metamorphs, egg masses, bufo, toad, larval amphibians, ambystoma tigrinum, metamorphosed, breeding sites, date metamorphosis, ambystoma maculatum, frogs toads, time metamorphosis, ambystoma talpoideum, pond drying, larval amphibian, salamander larvae, timing metamorphosis, larval development, amphibians reptiles, j p collins, number tadpoles, salamander ambystoma, breeding pond, effects larval, wood frogs

## 12 Intertidal ecology

rocky intertidal, intertidal, coral reef, rocky intertidal community, reef, barnacles, experimental marine biology, coral reefs, marine biology, reefs, experimental marine, rocky shores, coral, marine intertidal, provision subsequent, reef fishes, intertidal zone, kelp, utilization space, barnacle, subsequent utilization, intertidal communities, wave action, sea urchins, marine, limpets, rocky intertidal communities, marine ecology progress, urchins, ecology progress series, corals, biology ecology, benthic marine, subtidal, new england rocky, larval settlement, coral reef fish, rocky intertidal zone, great barrier reef, england rocky intertidal, rocky shore, algae, mussels, coral reef fishes, marine algae, macroalgae, food web complexity, complexity species, web complexity, intertidal community, oceanography marine, fishes, mussel, kelp forest, algal, sessile, marine science, fishes coral, barnacle balanus, great barrier, international coral reef, reef fish, caribbean reef, seaweeds, limpet, coralline algae, ecology rocky, dominant competitor, marine invertebrates, high intertidal, rocky, balanus glandula, intertidal algal community, low tide, marine organisms, rocky intertidal algal, sessile organisms, herbivorous fishes, intertidal community structure, caribbean coral, marine plants, low intertidal, kelp beds, institute marine, giant kelp, larval recruitment, newly settled, settlement recruitment, principal predator

## 13 Survival analysis

censoring, censored data, failure time, proportional hazards, proportional hazards model, censored survival, failure times, censored survival data, hazard function, survival data, censored, partial likelihood, models life, survival function, hazards model, failure time data, counting processes, survival time, large sample study, survival times, estimation incomplete, survival analysis, cumulative hazard, uncensored, censoring times, analysis censored, censored observations, censoring time, analysis failure, analysis survival, incomplete observations, nonparametric estimation, cox model, life tables, counting process, random censorship, product limit, hazard, cox, hazard functions, model counting

## 14 Island biogeography

island biogeography, theory island, island area, theory insular, equilibrium theory, small islands, species number, immigration extinction, canonical distribution, macarthur wilson, islands have, distribution commonness, insular biogeography, island size, species islands, larger islands, insular zoogeography, smaller islands, avifaunas, species area, land birds, large islands, archipelago, species turnover, statistics biology, experimental zoogeography, species numbers, macarthur, habitat diversity, islands, commonness, number islands, assembly species, extinction rates, california channel islands, simberloff, california channel, avifauna, species turnover rates, species pool, island species, number species, nonequilibrium insular biogeography, southwest pacific, evolution communities, structure insular, island faunas, channel islands, islands california, insular mammalian, empty islands, nested subsets, numbers species, insular mammalian faunas, bird species

## 15 Riparian ecology

aquatic insects, north american benthological, stream ecosystems, j n am, h b n, american benthological society, stream ecosystem, macroinvertebrates, woodland stream, streams, stream invertebrates, particulate organic matter, periphyton, running waters, benthic, stream, detritus, current velocity, aquatic sciences, journal fisheries, fisheries aquatic, mayfly, benthic invertebrates, stream bottom, ecology aquatic, stream insects, mountain stream, riffle, stream ecology, invertebrates, stream water, k w cummins, theoretische und angewandte, lotic, mayflies, v h resh, stream benthos, lotic ecosystems, desert stream, downstream, riffles, fine particulate organic, fisheries, archiv fur hydrobiologie, headwater streams, river continuum, b n hynes, diatoms, limnology oceanography, river continuum concept, stream channel, fur theoretische und, headwater, caddisfly, und angewandte limnologie, vereinigung fur theoretische, s g fisher, organic matter, benthos, particulate organic, caddisflies, verhandlungen der internationalen, upstream, laboratory streams, stream benthic, ecology running, stream bed, aquatic, der internationalen vereinigung, streambed, stream communities, g w minshall, coarse particulate organic, invertebrate drift, small streams, headwater stream, c e cushing, j l meyer, function stream, riparian vegetation, periphyton communities, trichoptera, chironomids, sonoran desert stream, dynamics lotic, benthic macroinvertebrates, river, shredders, algae, stream community, nymphs, fine particulate, dissolved organic, secondary production, stoneflies, streams rivers, water temperature, aquatic insect, hyporheic, stream invertebrate, small stream, j r webster, invertebrate, coarse particulate, internationalen vereinigung fur, baetis, stream periphyton, j v ward, freshwater ecosystems, insects north, chironomidae, macroinvertebrate communities, r l vannote, resh d, h resh

## 16 Membrane cell biology

golgi, vesicles, golgi complex, golgi apparatus, secretory, plasma membrane, endoplasmic reticulum, secretory pathway, endoplasmic, endocytosis, endocytic, membrane proteins, membrane, vesicle, plasma, cell surface, membranes, intracellular, intracellular transport, lysosomes, protein transport, endosomes, compartment, golgi membranes, membrane traffic, newly synthesized, membrane protein, recycling, secretory proteins, protein sorting, vesicular transport, transport vesicles, endocytic pathway, coated vesicles, clathrin, vesicular stomatitis virus, vesicular, trafficking, proteins, rockefeller university, journal cell, compartments, er golgi, tgn, vesicular stomatitis, lysosomal, golgi stack, integral membrane, reticulum, cytosol, cells incubated, rat liver, k simons, golgi cisternae, cisternae, exocytosis, fusion, pathway, mellman, secretion, endosomal, vacuolar, protein, reticulum golgi, coated pits, localization, incubated, receptor, abbreviations used, yeast, transport, cytosolic, cytoplasmic, plasma membrane proteins, immunoprecipitated, brefeldin, budding, vesicle formation, biogenesis, sorting, synaptic vesicle, organelles, antibodies, glycoproteins, j e rothman, secretory vesicles, vacuole, transferrin, cells grown, g warren, cytoplasmic domain, chased, mdck cells, endosome, golgi membrane, lysosomal enzymes, cells labeled, labeling, r schekman, vesicle budding, s kornfeld, vesicular traffic, golgi transport, immunoprecipitation, trans golgi, early endosomes, antibody, g protein, integral membrane protein, described materials, membrane fusion, targeting, golgi stacks, coat proteins, basolateral, receptors, vesicle fusion, centrifugation, apical basolateral, r g w, transferrin receptor, revised form, exocytic, fuse, coated vesicle, organelle, rough endoplasmic, endocytic vesicles, low density lipoprotein, cells washed, subcellular fractionation, rough endoplasmic reticulum, glycosylation, cell biology, integral membrane proteins, transport secretory, received publication, transmembrane, localized, washed, internalization, membrane recycling, trends cell biol, incubation, mutant, immunoelectron microscopy, golgi region, lumen, centrifuged, synaptic vesicles, resuspended, colocalization, endocytosed, glycoprotein, late endosomes, permeabilized, secretory granules, secretory protein, trans, cell, protein secretion, lysosomal enzyme, cytoplasmic tail, supernatant, intracellular membrane, solubilized, membrane trafficking, polarized epithelial, cytoplasm, pbs, lysosome, perinuclear, mannose, traffic, vacuoles, sorting signals, mammalian cells, labeled, small vesicles, rat, proteins destined, lysed, l orci, chase, transfected, gold particles, secreted, internalized, cells treated, cells, endocytic pathways, electron microscopy, transport proteins, saccharomyces cerevisiae, cells fixed, visualized, purified, washed three times, m g farquhar, processed, immunofluorescence, intracellular sorting, endosomes lysosomes, membrane glycoproteins, sigma chemical, stomatitis virus g, basolateral plasma, subcellular distribution, washed three, fusion protein, plasma membranes, endocytic compartments, semliki forest, cells expressing, clathrin coat, marker, basolateral surface, canine kidney cells, endosomal compartment, yeast secretory, semliki forest virus, performed described, newly synthesized proteins, pellet, eluted, oligosaccharides, docking

## 17 Plant systematics

chloroplast dna, classification flowering, missouri botanical, nuclear ribosomal, missouri botanical garden, rbcl sequences, angiosperms, clade, strict consensus, nuclear ribosomal dna, pollen morphology, based rbcl, rbcl, monophyly, monophyletic, rbcl sequence, parsimonious trees, phylogenetic relationships, j d palmer, phylogeny, sister group, plastid, cladistic analysis, chloroplast, phylogenetic analysis, rbcl sequence data, genera, quantities fresh, clades, phylogenetic analysis using, procedure small, phylogenetic analyses, molecular data, internal transcribed spacer, strict consensus tree, rapid dna isolation, plastid gene, system classification, rapid dna, flowering plants, molecular systematics, dna isolation procedure, angiosperm phylogeny, angiosperm, plastid gene rbcl, fresh leaf tissue, plant systematics, monophyletic group, j l doyle, engler, sister, phylogenetic, two genera, parsimony analysis, doyle, fresh leaf, integrated system, rbcl gene, internal transcribed, sequence data, families flowering, cpdna, major clades, phylogenetics seed, monotypic, based chloroplast, m w chase, j j doyle, circumscription, isolation procedure, consensus tree, analysis nucleotide, tribe, systematics evolution, chloroplast dna restriction, characters, retention index, m j donoghue, d e soltis, nucleotide sequences, molecular phylogenetics, consistency index, doyle doyle, dna restriction site, missouri, wood anatomy, outgroup, taxa, ribosomal dna, morphological characters, fossil history, molecular phylogeny, phylogenetic studies, paraphyletic, affinities, morphological data, r k jansen, using bootstrap, basal, j arnold arbor, angiosperm evolution, cladistic analyses, asteridae, major lineages, bootstrap values, rbcl data, cladistic, dna sequences, weakly supported, form monophyletic, chromosome number, chromosome numbers, related genera, synapomorphy, chloroplast genome, herbarium specimens, phylogenetic position, internal transcribed spacers, new genus, chloroplast dna variation, parsimony analyses, plant taxonomists, based nuclear, carpels, evolution classification, fossil, three genera, genus, evidence angiosperm, heuristic search, saxifragaceae sensu, systematic position, outgroups, character states, subtribe

## 18 Voles

voles, vole, population cycles, microtine rodents, small rodents, small mammals, *microtus pennsylvanicus*, *microtus*, vole populations, fluctuating populations, microtine, *m pennsylvanicus*, cycles small, small mammal, small rodent, *clethrionomys glareolus*, field vole, bank vole, *microtus ochrogaster*, populations *microtus*, trapping, rodent populations, bank voles, vole population, rodents, *microtus agrestis*, microtine cycles, *m ochrogaster*, *ochrogaster m*, meadow voles, small mammal populations, changes fluctuating, *microtus californicus*, *c j krebs*, population fluctuations, small rodent populations, meadow vole, field vole *microtus*, vole *microtus agrestis*, prairie vole, population cycle, house mice, lemmings, *peromyscus maniculatus*, fluctuating vole, *pennsylvanicus* southern, *microtus townsendii*, vole cycles, microtines, live traps, mice, traps set, litters, microtine populations, microtine population, spacing behaviour, field voles, populations small, populations *m*, prairie voles, trapping period, population *microtus*, new world *microtus*, meadow, *m agrestis*, number voles, mouse populations, traps, cyclic populations, trapping periods, *peromyscus*, house mouse, *clethrionomys*, voles have, *c glareolus*, low phase, density *microtus*, increase phase, krebs et al, *r h tamarin*, cycles voles, henttonen et al, rodent species, rodent, vole *clethrionomys*, microtine rodent, vole *microtus*, california voles, density variations, species *microtus*, litter size, chitty, vole cycle, population regulation, biology new, vole *clethrionomys rufocanus*, cyclic, rodent dynamics, *pennsylvanicus*, home range, trapping session, vole densities, *apodemus sylvaticus*, peak densities

## 19 Unemployment

duration unemployment, job search, unemployment, unemployed, unemployment rate, unemployed workers, wage, unemployment duration, reservation wage, worker, workers firms, layoffs, wage offer, labor market, unemployment insurance, journal labor, quits, rate unemployment, unemployment spells, wages, quit, wage offers, layoff, unemployed worker, new job, employment unemployment, worker has, firms workers, labour market, unemployment rates, unemployment spell, labor economics, search model, labor markets, employed workers, job offers, spells unemployment, effect unemployment, spell unemployment, unemployment benefits, number workers, workers do, equilibrium unemployment, spells, level unemployment, reservation wages, job offer, increase unemployment, industrial labor, workers have, wage growth, young workers, jobs, higher wage, aggregate unemployment, higher wages, labor relations, unemployment durations, wage *w*, employers, unemployment employment, job tenure

## 20 Marital disruption

divorce, journal marriage, marital disruption, marriages, marital dissolution, remarriage, marital, marriage, marital instability, cohabitation, journal family, first marriage, first marriages, marriage family, children divorce, divorced, divorce rate, marry, divorce rates, married, family structure, marriage divorce, couples, marital stability, divorces, cohabiting, remarried, living arrangements, divorce remarriage, child support, effects divorce, life course, family formation, parental divorce, spouse, separation divorce, family life, fathers, marital status, marrying, families households, marriage rates, divorce separation, spouses, cohabitation marriage, children living, marriage has, age marriage, family issues, divorce children, mothers, family disruption, consequences divorce, single mothers, children live, cohabiting couples, likely marry, stepparent, divorce have, divorce has, marriage cohabitation, divorced parents, analysis marital, marriage have, intact families, effects marital, survey families, noncustodial, divorced women, cohabit, married couples, impact divorce, stepfamilies, children divorced, single parent, population association, marital history

## 21 Nesting ecology

nest predation, nesting success, nest success, nest predators, artificial nests, neotropical migrant, suggestions calculating, calculating nest, calculating nest success, conservation neotropical, nesting, nests, effects nest, neotropical migrant landbirds, mayfield method, bird populations, breeding bird, forest fragmentation, number nests, avian nest, migratory songbirds, predation artificial, migratory birds, nests found, neotropical migratory, breeding birds, nest dispersion, decline migratory, j faaborg, avian nest dispersion, predation rates, forest tracts, brood parasitism, nest, grassland birds, s temple, predation forest, artificial nest, rates nest, nests placed, nest predation rates, nest survival, success migratory, forest birds, nest sites, neotropical migratory birds, nest site, depredated, cowbird parasitism, depredation artificial, neotropical migrants, success calculated, bird communities, calculated exposure, predation nest, management neotropical, nests located, bird species, nesting success calculated, effect nest, l w gysel, regional forest fragmentation, depredation, breeding bird survey, wildlife management, successful nests, north american breeding, nesting mortality, american breeding bird, nesting birds, dispersion fledging, ground nests, analysis nesting, predation brood, birds habitat, effects forest, forest bird, songbirds, birds north, journal wildlife, nest failure, bird abundance, forest songbirds, effect edge, fledging success, edge avian, mortality birds, ecology conservation, f r thompson, cowbirds, nests relation, avian nest predation, birds eastern, nesting habitat, nest density, duck nests, artificial ground, field ornithology, nest concealment, t e martin, depredated nests, cause nest, nesting cover, density nest, nest site selection, donovan et al, bird nests, appropriate habitat features, habitat features, studies avian, habitat edge, wood thrushes

## 22 HIV

human immunodeficiency virus, human immunodeficiency, virus, viral, immunodeficiency virus type, peripheral blood mononuclear, t cells, blood mononuclear cells, peripheral blood, hiv infection, viral replication, infection, reverse transcriptase, journal infectious, infected, infected cells, acquired immunodeficiency syndrome, viruses, j infect dis, infectious diseases, acquired immunodeficiency, retroviruses, env, t lymphocytes, t cell, aids, mononuclear cells, patients aids, lymphocytes, aids patients, infectious, virus replication, simian immunodeficiency virus, long terminal repeat, simian immunodeficiency, virus infection, cells infected, allergy infectious, pbmc, viral rna, institute allergy, hiv replication, allergy, disease progression, immunodeficiency virus, antiretroviral therapy, proviral dna, immunodeficiency virus infection, page charge payment, pathogenesis, page charge

## 23 Kernel analysis

nonparametric regression, density estimation, smoothing parameter, bandwidth, smoothing, kernel, regression function, smoothness, rates convergence, spline smoothing, kernel estimators, nonparametric, kernel estimator, rate convergence, smoothing parameters, kernel density, regression functions, nonparametric estimation, bandwidths, kernel function, bandwidth selection, annals statistics, spline, kernel estimate, smoothing splines, proof theorem, squared error, density f, kernel regression, nonparametric density, minimizer, smoothing spline, kernel estimates, splines, convergence nonparametric, minimax, key words, integrated squared error, noisy data, kernel estimation, estimators, design points, nonparametric estimates, nonparametric curve, bandwidth h, words phrases, local polynomial, estimator, mean squared error, bandwidth choice, kernel k, bias variance, asymptotically optimal, mean integrated squared, local linear, convergence rates, kernel method, theorem, function f, optimal bandwidth, kernel density estimation, spline models, bounded away, mean integrated, constant c

## 24 Cytoskeleton

microtubules, microtubule, tubulin, mitotic spindle, spindle, mitotic, microtubule assembly, mitosis, spindle microtubules, anaphase, spindle pole, microtubules vitro, kinetochores, spindles, centrosome, spindle poles, kinetochore, centrosomes, metaphase, cytoplasmic microtubules, mitotic spindles, microtubule dynamics, g g borisy, chromosome segregation, spindle assembly, chromosome movement, interphase, journal cell, dynein, chromosomes, cell cycle, cytoplasmic dynein, kinesin, rockefeller university, assembly microtubules, microtubule ends, depolymerization, mitotic apparatus, spindle formation, taxol, mitotic cells, cell division, motor proteins, m w kirschner, metaphase plate, microtubule polymerization, mts, brain tubulin, sea urchin, m kirschner, nuclear envelope, tubulin subunits, microtubule organization, polymerization, microtubule arrays, disassembly, microtubules have, prometaphase, microtubule protein, budding yeast, centrioles, spindle pole body, cell biology, number microtubules, microtubule nucleation, interphase cells, spindle elongation, assembly vitro, dynamic instability, nocodazole, metaphase anaphase, axonal transport, centrosomal, regulation microtubule, bipolar spindle, assembly disassembly, individual microtubules, xenopus egg, microtubule binding, kinetochore microtubules, living cells, microtubule depolymerization, cytoskeleton, j l rosenbaum, microtubules observed, poles, role microtubule, cytoplasm, microtubule function, asters, astral microtubules, axons, electron microscopy, j r mcintosh, assembly, microtubules assembled, associated microtubules, purified tubulin, microtubule growth, tubulin assembly, fission yeast, xenopus egg extracts, nucleus, vitro, microtubule organizing centers, control microtubule, brain microtubules, revised form, proteins, spindle organization, prophase, anaphase spindle, microtubule formation, cytokinesis, mitotic spindle assembly, ends microtubules, late anaphase, sea urchin eggs, coverslips, motors, e karsenti, immunofluorescence, tubulin polymerization, colchicine, motor protein, central spindle, staining, astral, axon, cytoplasmic, localization, received publication, bovine brain, anaphase onset, nucleation, centriole, protein, microtubule organizing, chromosome, pericentriolar material, onset anaphase, spindle fibers, chromosome alignment, sister chromatids, vivo, localizes, phosphorylation

## 25 Executive compensation

incentive contracts, executive compensation, hazard observability, optimal incentive, optimal contract, incentive schemes, effort level, moral hazard, ceo compensation, jensen murphy, salary bonus, hazard teams, relative performance evaluation, holmstrom, holmstrom milgrom, bonus, incentive scheme, tournaments optimum, effort levels

## 26 Forest soil ecology

forest soils, atmospheric deposition, hubbard brook, leaching, forest ecosystems, throughfall, dry deposition, nitrification, watersheds, mineral soil, hubbard, forest ecosystem, biogeochemistry, soil organic, nitrogen saturation, soil solution, nitrate, soil organic matter, n deposition, fluxes, forest soil, forested ecosystem, northern hardwood forest, hubbard brook experimental, forest floor, nitrogen cycling, forested watersheds, hubbard brook ecosystem, likens et al, denitrification, nitrogen deposition, mineralization, cycling, temperate forest ecosystems, nutrient cycling, northern hardwood, brook experimental forest, acid deposition, bulk precipitation, northern forest, wet deposition, n cycling, inorganic n, leached, base cations, atmospheric inputs, n inputs, terrestrial ecosystems, organic matter, mineralization nitrification, deposition forest, forest nutrient, nitrogen transformations, saturation northern, plant uptake, forested, watershed, solution chemistry, soils, soil horizons, n mineralization, f h bormann, nutrient budgets, mineral, leaching losses, precipitation chemistry, nitrogen mineralization, litterfall, soil solutions, effects acid, stream water, acidic deposition, nitrogen cycle, nutrient loss, cations, northern forest ecosystems, forested ecosystems, mineral cycling, soil science society, nitrate concentrations, aber et al

## 27 Leaf ecology

mineral nutrition, specific leaf area, specific leaf, wild plants, unit leaf, nutrition wild, leaf life, leaf longevity, use efficiency, nitrogen use efficiency, leaf area, leaf structure, relationships leaf, leaf mass, evergreen deciduous, reich et al, leaf nitrogen, net assimilation rate, photosynthetic capacity, relative growth rate, assimilation rate, relationship leaf, net assimilation, leaf life spans, leaf n, leaf life span, evergreen, sla, differing relative, ecology leaf, relationship wild, leaf traits, unit leaf area, area leaf, characteristics diverse, dry matter, leaf area ratio, leaf dry, plant functioning, evergreen species, carbon gain, nutrient use efficiency, photosynthetic rate, wild species differing, diverse ecosystems, leaf lifespan, species differing, range adaptive, deciduous species, relation nitrogen, inherent variation, nutrient resorption, nitrogen concentration, economy plant, mass area, rate leaf, nitrogen use, differences leaf, senescing leaves, convergence plant, photosynthetic rates, nutrient use, nitrogen supply

## 28 Daphnia

daphnia, daphnia pulex, zooplankton, daphnia magna, cladocerans, copepods, cladocera, cladoceran, d pulex, vertical migration, zooplankton communities, species daphnia, copepod, daphnia galeata, rotifers, daphnia species, zooplankton species, zooplankton community, zooplankton populations, d magna, limnology, resting eggs, pulex, food concentration, daphnia galeata mendotae, lake water, society limnology, d galeata, reproduction daphnia, populations daphnia, rotifer, planktivorous fish, population daphnia, plankton, diel vertical migration, j plankton res, s dodson, daphnia magna straus, ecology zooplankton, daphnia longispina, daphnids, freshwater zooplankton, calanoid copepods, daphnia populations, rate daphnia, crustacean zooplankton, bosmina longirostris, calanoid, bosmina, phytoplankton, food concentrations, w lampert, zooplankters, chaoborus, daphnia pulicaria, migration zooplankton, rates daphnia, diel vertical, chaoborus larvae, structure zooplankton, planktonic, planktonic rotifers, lakes, cladoceran populations, cyclopoid copepods, nauplii, two daphnia, daphnia population, cladoceran species, daphnia hyalina, diaptomus, composition plankton, p d n, seasonal succession, invertebrate predation, behavior daphnia, predation zooplankton, genus daphnia

## 29 Gender and labor

occupational segregation, sex segregation, occupations, wage gap, wage differentials, earnings women, labor market, occupational, occupational sex, labor markets, journal human, occupational sex segregation, equal pay, earnings gap, gender gap, industrial labor, occupational structure, wage discrimination, differences earnings, gender wage, internal labor markets, human capital theory, urban labor, earnings differences, differentials urban, human capital, labor relations review, internal labor, labor force, differences occupational, earnings differentials, female workers, work experience, job, labor relations, work occupations, comparable worth, employers, occupational categories, statistical discrimination, wage differences, labor market discrimination, male occupations, earnings men, jobs, segregation sex, women men, differences men, female occupations, labor market segmentation, market discrimination, occupational distribution, wage differential, job segregation, gender inequality, internal labor market, hours worked, earnings determination, gender wage gap, men women, gender segregation

## 30 Avian breeding ecology

great tit, nestling, brood reduction, brood size, nestlings, laying date, chicks, pied, hatching asynchrony, pied flycatcher, great tits, great tit parus, broods, first egg, clutch size, fledging, brood, tit parus major, nestling period, asynchronous hatching, breeding biology, clutch, clutches, pied flycatcher *ficedula*, timing breeding, great tits parus, tits parus major, flycatcher *ficedula hypoleuca*, nestling growth, significance clutch, size laying, fledged, altricial birds, date clutch, fledglings, last egg, laying dates, herring gull, egg laid, blue tit, clutch sizes, nest, blue tits, pied flycatchers, laying, laying sequence, arctic passerines, determination clutch, breeding success, factors affecting clutch, breeding blue, affecting clutch size, avian breeding, chick, hatching, regulation animal, egg formation, egg size, collared flycatcher, nests, size arctic, evolution clutch, parus major, animal numbers, tits, parus major 1, herring, parental care, fledging success, chick mortality, european starling, house martins, breeding blue tits, territory quality, adaptations breeding, parental survival, kestrel, energetic adjustments, variation egg, adjustments avian, nestling weight, clutch completion, natural regulation, onset incubation, growth nestling, reproduction birds, hatching date, tarsus length, d j t, song sparrows, tree swallow, breeding birds, house martins *delichon*, parental quality, martins *delichon urbica*, brood sizes, birds lay, larger clutches, egg laying, size birds, egg weight, consequences brood, fledged young, nestling great, egg composition, chick survival, nestling mortality, collared flycatcher *ficedula*, tree swallows, size breeding, ecological adaptations, number nestlings, size hatching, flycatcher *ficedula albicollis*, sibling competition, laying order, journal avian, egg volume, parental effort, variation clutch, nestling survival, laying period, fledge, nest failure, nestling great tits, eggs laid, egg

## 31 Landscape ecology

habitat patches, metapopulation dynamics, fragmented landscapes, landscape structure, metapopulation, habitat fragmentation, metapopulations, fragmented landscape, habitat patch, landscape ecology, patch occupancy, landscapes, connectivity, metapopulation models, effects habitat, metapopulation structure, spatially explicit, metapopulation persistence, patch size, metapopulation model, model metapopulation, patch area, hanski, effects landscape, suitable habitat, number patches, habitat loss, occupied patches, landscapes different, practical model, conservation biology, responses habitat, landscape connectivity, patches occupied, heterogeneity biological, patch, local extinction, fragmented, patch connectivity, effects patch, role corridors, mammals landscapes, g merriam, loss fragmentation, proportions suitable, distance patches, landscape pattern, connectivity population, landscape, probability patch, corridors, butterfly, patches, spatial structure, extinction thresholds, fragmentation birds, effects fragmentation, demographic genetic, butterfly *melitaea cinxia*

- 32 Capital structure capital structure, dividend policy, modigliani miller, optimal capital, optimal capital structure, debt equity, debt financing, dividend, retained earnings, corporate debt, modigliani, corporate tax, cost capital, tax advantage, dividends, f modigliani, financing investment, personal taxes, corporate tax rate, equity financing, bondholders, bankruptcy costs, miller modigliani, capital gains, corporate personal, amount debt, optimal financial, financial structure, dividend payments, cost debt, journal finance, modigliani m, corporation finance, determination financial, debt, value debt, dividend payout, tax rate, use debt
- 33 Generalized linear models analysis using generalized, generalized estimating, data analysis using, models longitudinal, longitudinal data analysis, using generalized linear, binary responses, generalized estimating equations, generalized linear models, liang zeger, generalized estimating equation, liang, analysis longitudinal, generalized linear, estimating equations, binary data, random effects, correlated binary, models repeated, gee, estimating equation approach, binary response, yij
- 34 Reproductive demography family planning, studies family, fertility decline, population development, family planning program, contraception, development review, family planning programs, fertility, total fertility, high fertility, contraceptive use, child mortality, fertility transition, international family planning, fertility control, decline fertility, determinants fertility, demographic health, planning programs, contraceptive, family size, contraceptive prevalence, planning program, total fertility rate, demographic transition, population council, fertility levels, births, family planning services, fertility rates, desired family size, world fertility, contraceptive methods, rural areas, national family planning, fertility family, rural, lower fertility, infant child, desired family, fertility developing, population policy, contraceptives, fertility rate, world fertility survey, number children, infant mortality, marital fertility, married women, planning services, living children, developing countries, childbearing, fertility behavior, age marriage, fertility change, fertility declines, fertility mortality, fertility regulation, family limitation, couples, use contraception, birth control, bangladesh, family planning methods, levels fertility, national family, health family, level fertility, contraceptive method, number births, practice contraception, women reproductive, husbands, practice family, contraceptive practice, reproductive age, fertility reduction, currently married women, children ever born, iud, ministry health, villages, crude birth, rural women, control fertility, proportion women, child survival, population association, agency international, number living, demand children, birth rate, family planning perspectives, surviving children, crude birth rate, influence fertility, low fertility, health surveys, health survey, children ever, breastfeeding, maternal child, theory fertility, fertility has, impact fertility, live births, currently married, demographic change, effect fertility, limit family

## 35 Time series analysis

unit root, unit roots, cointegration, autoregressive time series, autoregressive time, cointegrating, unit root tests, economic time series, macroeconomic time, economic time, cointegrating vectors, estimators autoregressive, cointegrated, p c b, root tests, dickey fuller, critical values, engle granger, autoregressive, testing unit, stock watson, integrated order, deterministic trend, statistical time, limiting distribution, engle, asymptotic distributions, limiting distributions, nonstationary time, asymptotic distribution, cointegration vectors, nonstationary, nonstationary time series, dickey, cointegrating vector, testing cointegration, series regression, macroeconomic time series, analysis cointegration, unit root hypothesis, stochastic trends, time series regression, walks macroeconomic, time series models, unit circle, tests unit, lag length, random walks, unit root test, error correction, inference cointegrated, asymptotic theory, bulletin economics, stationary, oxford bulletin, root time, continuous mapping theorem, nelson plosser, johansen, test statistics, stationarity, stationary process, vectors gaussian, tests cointegration, introduction statistical, integrated processes, phillips, stochastic trend, cointegration tests, cointegrated systems, martingale difference

## 36 Computational Bayesian statistics

posterior distribution, gibbs sampler, posterior distributions, gibbs, markov chain monte, chain monte carlo, bayesian statistics, prior distribution, gibbs sampling, bayesian analysis, bayesian, markov chain, prior distributions, posterior density, calculating marginal, approaches calculating, bayesian inference, priors, posterior mean, mcmc, bayesian approach, marginal posterior, joint posterior, posterior, markov chains, bayes factors, posterior means, bayesian model, sampler, prior density, bayes factor, bayes, posterior probability, bayesian computation, gelfand smith, exploring posterior, bayesian restoration, monte carlo methods, chains exploring, calculation posterior, hyperparameters, full conditional, uniform prior, methods using markov, conditional distributions, using markov chains, carlo sampling methods, sampling methods using, markov, using gibbs, posterior probabilities, calculating marginal densities, bayesian methods, importance sampling, iterative simulation, iterative simulation using, data augmentation, posterior moments, joint posterior distribution, simulation using multiple, fast computing, monte carlo sampling, prior information, prior mean, normalizing constant, related markov chain, f m, calculations fast, gelfand, conditional posterior, related markov

## 37 Mergers and acquisitions

market corporate, tender offers, takeover, tender offer, bidder, takeovers, shareholder, corporate control, shareholders, shareholders have, bidders, tender, corporate law, fiduciary duty, hostile takeover, takeover bid, business judgment, corporation law, target shareholders, takeover bids, fiduciary duties, fiduciary, federal securities, business judgment rule, j corp l, management responding, target firm, defensive tactics, minority shareholders, bids, target management, incumbent management, corporate governance, mergers, target firms, shareholders do, hostile takeovers, shareholder vote, securities exchange act, shareholder approval, delaware supreme, exchange act, corporate acquisitions, stockholders, hostile tender, merger, securities exchange, acquirer, board directors, directors, delaware supreme court, cash tender, charter amendments, williams act, easterbrook fischel, judgment rule, frank h easterbrook, target company, breach fiduciary, delaware law, agency costs, sell shares, corporate managers, acquisitions, securities laws, shareholders receive, bid, shareholder wealth, takeover defenses, corporation private, shareholder voting, takeover activity, securities act, publicly held, act release, securities regulation, delaware courts, poison pill, v mesa petroleum, officers directors, hostile bid, public corporations, independent directors, modern corporation, outstanding shares, takeover attempt, proxy contest, majority shareholders, bidding, federal securities laws, poison pills, proxy contests, corp v mesa, shareholders vote, tactics tender, wealth effects, federalism corporate, corporate directors, role corporate, benefit shareholders, acquirers, controlling shareholder, principles corporate, successful tender, unocal corp v, insider trading, stockholder, exchange commission, directors have, issuer, delaware, directors officers, publicly traded, bidder has, antitakeover, sec, american corporate, exchange act release, interests shareholders, tender shares, shareholders benefit, potential bidders, voting stock, corporate charters, case defensive, sec has, corporate charter, minority shareholder, corporate assets, shareholders tender

## 38 US party identification

party identification, american voter, systems mass, nature belief, issue positions, political attitudes, mass publics, political information, national election studies, national election study, presidential candidates, presidential elections, partisanship, public opinion quarterly, electorate, voting behavior, electoral choice, american electorate, national election, candidate evaluation, voters, american political science, issue voting, candidate evaluations, voter, belief systems, center political, vote choice, ideology discontent, donald e, american national election, political sophistication, partisan, mass opinion, mass public, origins mass, independents, nes, political studies, changing american voter, political science review, model electoral, presidential election, political knowledge, donald e stokes, nature origins, philip e, presidential, question wording, electoral behavior, election studies, political psychology, journal politics, stanley feldman, consortium political, political science, american political, elections, presidential campaigns, american national elections, parties candidates, partisan identification, dynamic simultaneous equation, presidential campaign, democrats, model candidate, republicans, retrospective voting, election, partisans, voting american, republican, midwest political science, democratic party, public opinion

## 39 Classical Greece

athenian, athens, inscription, agora, fifth century, inscriptions, athenians, fourth century, acropolis, attic, greek, hellenistic, athena, athenian agora, marble, stoa, dated, archon, third century, statue, school classical, inscribed, stele, second century, temple, american school, archonship, epigraphical, excavations, bronze, classical studies, vases, zeus, sixth century, sanctuary, panathenaic, attica, parthenon, stone, vase, statues, restorations, apollo, deme, late roman, roman, monument, fourth century bc, greeks, coins, prytany, altar, century christ, goddess, archons, demotic, eleusinian, agora excavations, corinth, pentelic marble, restored, festival, cult, first century, areopagus, eleusis, fifth century bc, amphora, corinthian, attested, decree, pottery, archaic, monuments, hellenistic period, terracotta, lettering, dating, pausanias, frieze, dedications, roman period, third century bc, meritt, restoration, demos, second century bc, delphi, greece, stoa attalos, archaeological institute, tomb, greek roman, decoration, byzantine, delos, demeter, gods, tholos, dionysos, drapery, two fragments, late fifth, pediment, new fragment, boule, herakles, genitive, kerameikos, letter forms, traces, excavation, nike, epigraphical museum, shrine, aphrodite, b d meritt, fragmentary, peloponnesian, patronymic, reliefs, dedication, temple apollo, broken away, two inscriptions, first century bc, sculpture, studies athens, roman times, fragment, decorated, doric, wreath, antiquities

## 40 Teen sexual behavior

sexually active, sexual behavior, alan guttmacher, sexual activity, teenagers, intercourse, alan guttmacher institute, family planning perspectives, sexual intercourse, pregnancy, first intercourse, journal sex, sexual experience, adolescent pregnancy, pregnancies, adolescent sexual, premarital sexual, teenage pregnancy, unintended pregnancy, contraceptive use, sexually transmitted, adolescents, sex education, contraception, sexual attitudes, contraceptive, sexually, teenage, sexually transmitted diseases, become pregnant, had intercourse, condom use, condom, family planning, sex research, adolescent sexuality, survey family, had sexual intercourse, adolescent, birth control, adolescent sexual behavior, sexually experienced, planning perspectives table, young women, planning perspectives, alan, abortions, sexual partners, sexual behaviors, had sex, condoms, coitus, women aged, contraceptives, use condoms, have sex, pregnancy prevention, sexuality, family growth, sexual contraceptive, first sexual, unintended pregnancies, contraceptive method, pregnant

## 41 Growth economics

endogenous growth, mechanics economic, empirics economic, economic growth, empirics, physical capital, capital accumulation, gdp, capita gdp, grossman helpman, constant returns, growth models, gdp capita, endogenous growth models, increasing returns, production function, growth model, neoclassical growth, capital stock, total factor productivity

## 42 Waterfowl

canada geese, waterfowl, geese, ducks, lesser snow geese, wintering, snow geese, lesser snow, swans, swans north, mallards, nutrient reserves, wintering areas, goose, spring migration, breeding grounds, female lesser, goslings, female lesser snow, geese swans, c d macinnes, c d ankney, d g raveling, black ducks, canada goose, diving ducks, mallard, lesser scaup, breeding waterfowl, wintering waterfowl, canadian wildlife, geese winter, lesser snow goose, composition canada, flocks, wood ducks, reserves reproductive, wintering grounds, snow goose, barnacle geese, performance female, duck, greater snow geese, female mallards, wild geese, geese special, ducks wintering, greater snow, canadian wildlife service, cycle body, management breeding, body composition, american black ducks, geese have, breeding areas, reserve dynamics, northern pintails, spring staging, fish wildl, nutrient reserve dynamics, national wildlife refuge, black brant, dabbling ducks, mississippi flyway, reference control, geese nesting, e g bolen, flock, l h fredrickson, waterfowl species, fish wildlife, staging areas, pintails

## 43 Mental health

journal health, health social, psychological distress, mental illness, life events, mental health, general psychiatry, stressful life, stressful life events, life stress, stress mental, social behavior table, social support, archives general, catherine e, psychiatric symptoms, psychiatric disorder, physical health, status psychological, bruce p, journal psychiatry, science medicine, catherine e ross, journal epidemiology, differences mental, distress, social behavior, illness, mental disorders, roles mental, stress process, stressors, psychiatric disorders, community mental, bruce p dohrenwend, community psychology, structure coping, mental disease, depression scale, differences psychological, nervous mental, levels distress, john mirowsky, depressive symptoms, stressful, joseph t mullan, social stress, journal nervous, university journal, mirowsky ross, mental disorder, john catherine, journal psychosomatic, pearlin, journal community, symptoms, psychosomatic research, coping resources, ronald c, differences depression, psychiatric, status mental, stressful events, psychological disorder, pearlin et al, health married, barbara s dohrenwend, joseph t, institute mental

## 44 Polar ecology

arctic alpine, arctic tundra, tundra, alpine research, tussock tundra, arctic plants, arctic, alaskan arctic, alpine plants, tundra plants, eriophorum vaginatum, tundra ecosystems, tundra vegetation, tundra plant, alaskan, arctic ecosystems, ecology arctic, alpine tundra, permafrost, tundra soils, alaskan tundra, alaskan arctic tundra, arctic alaska, tussock, soil temperature, high arctic, tundra plant species, response tundra, arctic vegetation, soil temperatures, plant growth forms, arctic soils, graminoids, active layer, alaskan tussock, alaskan tussock tundra, alpine, mosses, northern alaska, change arctic, vegetation production, oxyria digyna, alpine plant, ecophysiological perspective, betula nana, brooks range, lichens, alpine vegetation, dwarf shrubs, growing season, individualistic growth response, carex bigelowii, arctic tundra ecosystems, alpine species, chapin et al, toolik lake, thaw, tundra experimental, l c bliss, institute arctic, environmental manipulations, simulated environmental change, w d billings, coastal tundra, experimental observed, alpine snowbank, e vaginatum, various plant growth, arctic plant, fertilization various, flora alaska, responses arctic, simulated environmental, production ecology, snow cover, balance arctic, thaw depth, snowbank environment, alpine snowbank environment, alpine tundras, tundra species, alpine environments, snowmelt, growth forms, alaska neighboring, high arctic ecosystem, cassiope tetragona, eriophorum vaginatum l, wet sedge, wet meadow

## 45 Muscle biochemistry

myosin, actin filaments, actin, nonmuscle cells, actin myosin, actin filament, filaments, rabbit skeletal muscle, contractile, rabbit skeletal, t d pollard, actin polymerization, microfilaments, muscle actin, heavy meromyosin, contractile proteins, dictyostelium discoideum, nonmuscle, skeletal muscle, polymerization actin, cytoplasmic actin, smooth muscle, muscle myosin, cytochalasin b, spudich, e d korn, myosin heavy chain, cell motility, myosin heavy, t p stossel, interaction actin, actin binding, microvilli, dictyostelium, skeletal muscle actin, tropomyosin, localization myosin, filament, organization actin, polymerization, microfilament, spudich watt, d l taylor, actin monomers, skeletal muscle contraction, distribution actin, myosin filaments, chicken gizzard, stress fibers, filament bundles, muscle, regulation rabbit, brush border, journal cell, filamentous actin, microfilament bundles, complex actin, cytoskeleton, s watt, motility, m s mooseker, actomyosin, actin concentration, intestinal epithelial, striated muscle, actin assembly, thick filaments, microvilli intestinal, actin prepared, cell locomotion, microvillus, cell movement, cell shape, dictyostelium myosin, myosin actin, k weber, localization actin, contractility, skeletal muscle myosin, intestinal epithelial cells, gelsolin, muscle nonmuscle, cell biology, thin filaments, cytochalasin, intestinal brush, concentration actin, association actin, amount actin, actin purified, contractile ring, smooth muscle myosin, revised form, myosins, capping, myosin light chain, bundles actin, cytoskeletal, effects cytochalasin, meromyosin, atpase activity, myosin ii, binding actin, rockefeller university, bind actin, fragments myosin, actin bundles, role actin, myosin light, acanthamoeba, cytoplasm, rockefeller university press, myosin molecules, acanthamoeba castellanii, electron microscopy, negatively stained, purified actin, gelation, electron microscope, amoeboid movement, h holtzer, viscosity, filaments have, polymerized actin, received publication, cell biology volume, intestinal brush border, filament polarity, phalloidin, regulation actin, myosin molecule, monomeric actin, bundles, contractile basis, presence actin, arrowhead complexes, cortical, cytoplasmic filaments, total actin, contraction, dialyzed, cleavage furrow, heavy chain, actin associated, u lindberg, visualization actin, actin present, low ionic, actin monomer, villin, barbed, cytochalasins, actin filament bundles, proteolytic fragments, polymerized

## 46 Consumer theory

permanent income, bequests, government bonds net, liquidity constraints, consumption function, disposable income, intergenerational transfers, consumption income, bequest, propensity consume, permanent income hypothesis, marginal propensity, aggregate consumption, real interest rate, aggregate capital, labor income, government debt, current consumption, sensitivity consumption, current income, bequest motive, ricardian equivalence, income consumption, real interest, future income, fiscal policy, budget constraint, interest rate, net worth, income hypothesis, time preference

## 47 Frugivory

frugivores, frugivorous birds, frugivory, frugivorous, ripe fruits, seed dispersers, avian frugivores, seed dispersal systems, avian dispersers, dispersal agents, fruit pulp, dispersers, seed dispersal, fruit species, pulp, fleshy fruits, fruit choice, ripe fruit, fruit removal, ecology coevolved, fruit consumption, fruits eaten, coevolved seed, coevolved seed dispersal, frugivory seed, frugivores seed, frugivore, disperse seeds, fruiting, fruit selection, fruit characteristics, fruits consumed, fruiting trees, frugivorous bird, dispersers tropical, fruit availability, seeds dispersed, fruit presentation, principles dispersal, presentation seed, fruiting plants, dispersal seeds, dispersal higher, vande kerckhove, wild fruits, disperser, crop size, ecology seed, fruit, competition avian, tropical birds, species fruit, fruit eating, fruit size, fruit crop, fruit abundance, evolution temperate, avian seed dispersers, fruits, fruit crops, implications seed, cedar waxwings, coevolution animals, dispersal system, patterns fruit, evolutionary aspects, interaction mediterranean, mediterranean scrublands, effects fruit, constraints coevolution, dispersal birds, seed dispersal system, birds fruits, species fruits, seed predators, howe estabrook, howe vande, frugivorous species, tropical frugivorous, eat fruits, variation fruit, prunus mahaleb, defecated, seed deposition, fruits removed, fruiting season, quality fruits, migrant frugivorous

## 48 Mycorrhizal biology

mycorrhizal fungi, mycorrhizal, mycorrhizal infection, va mycorrhizal, mycorrhizas, hyphae, mycorrhizal fungus, mycorrhizal plants, arbuscular mycorrhizal, arbuscular mycorrhizal fungi, fungi, mycorrhiza, va mycorrhizal fungi, mycorrhizae, root length, mycorrhizal roots, fungi rapid, british mycological, assessment infection, staining parasitic, spores, mycorrhizal colonization, fungus, glomus mosseae, external hyphae, roots staining, root colonization, clearing roots, arbuscular, am fungi, procedures clearing, arbuscules, glomus, inoculum, improved procedures, vesiculararbuscular mycorrhizal, rapid assessment, arbuscular mycorrhizas, mycorrhizal fungus glomus, colonization roots, infection roots, fungal, percentage root, mycorrhizal associations, root system, mycorrhizal symbiosis, mycorrhizal root, endomycorrhizal fungi, nonmycorrhizal, plant roots, symbiosis, vam fungi, hyphal, pot cultures, g mosseae, mycelium, endogonaceae, am fungal, spore, root systems, mycorrhizal nonmycorrhizal, british mycological society, soil biology, nonmycorrhizal plants, vam, mycorrhiza plant, fungal species, va mycorrhizas, plant growth responses, effects mycorrhizal, phosphorus, mycorrhizal inoculum, glomus intraradices, vesicular arbuscular, fungi associated, mycorrhizal hyphae, root length colonized, mycorrhiza formation, trifolium subterraneum, endophyte, va mycorrhiza, growth mycorrhizal, arbuscular mycorrhizal fungus, inoculated, pot, mycorrhizal infections, va mycorrhizae, length colonized, spores g, roots mycorrhizal, stained trypan, mycorrhizal fungi associated, arbuscular mycorrhiza, rhizosphere, infected root, fungal hyphae, length root, hyphal growth, vesiculararbuscular mycorrhizal fungi, inoculation, gigaspora margarita, wet sieving, fungi soil, total root length, species mycorrhizal, plant soil, pot culture, phosphorus nutrition, vesicular arbuscular mycorrhizal, plants inoculated, trypan blue, external mycelium, response mycorrhizal, new phytologist, root segments, roots colonized, mycorrhizal research, length infected, root length infected, total root, pots, spores glomus, phosphate, root samples, cleared stained, endogone, plants grown, vesiculararbuscular mycorrhiza, plant growth, p uptake, mycorrhizal status, mycorrhizal association, va mycorrhizal infection, inoculum potential, p concentration, biology biochemistry, fungi plant, mycorrhizae plant, g intraradices, development endomycorrhizal, spores mycorrhizal, ectomycorrhizal, endomycorrhizal, glomus species, growth responses, effect mycorrhizal, am fungus, glomus fasciculatum, symbionts, endogone spores, spore germination, mycorrhizal development, plants harvested, mycorrhizal inoculation, endomycorrhizae, phosphorus uptake, evaluation techniques, root infection, endomycorrhizal root, trifolium subterraneum l, endophytes, fungal colonization, hyphae soil, spore numbers, arbuscular mycorrhizae, mycorrhizal fungal, fungal structures, development mycorrhizal, p content, plants mycorrhizal, mycorrhizal endogone species, inoculated glomus, endogone mycorrhiza, extraradical, principles mycorrhizal, arbuscular mycorrhizal fungal, host plant, mycorrhizal endogone, sieving decanting, arbuscule, mycorrhizal dependency, roots, colonized roots, plant root, fungal symbiont, diversity arbuscular, extracted soil, onion roots, endomycorrhizal root systems, roots washed, number spores, cortical cells, mycorrhiza natural, fungi have, ectomycorrhizal fungi, inoculated plants, extraradical hyphae, roots infected, gives objective, roots cleared, plant fungal, fungus glomus intraradices, endogone species extracted, d s hayman, plants colonized, colonized root, va mycorrhizal fungus, gigaspora margarita becker, uptake mycorrhizal, plant nutrition, extraradical mycelium, root surface, infected roots, mycorrhizal formation, field soil

## 49 Biological invasions

biological invasions, plant invasions, invasive species, invasions, invasive, native species, invasive plants, ecology biological, alien species, exotic species, ecology invasions, introduced species, alien plants, invaders, plant invasion, invasions north, invasion success, invader, invasibility, invasions animals, exotic plant species, native plant, biological invasion, exotic plants, invasive plant, exotic, invading species, nonindigenous species, exotic plant, america hawaii, concept invasibility, global perspective, alien plant, species introduced, invasion alien, native alien, native range, native plants, native plant diversity, native exotic, invasive plant species, plant species invade

## 50 Mass extinction

paleontological society, phanerozoic, mass extinctions, mass extinction, stratigraphic, paleozoic, ordovician, fossil record, cambrian, fossil, geologic time, history life, origination extinction, stratigraphic ranges, brachiopods, journal paleontology, geological society, treatise invertebrate, origination, model phanerozoic, taxonomic diversity, d m raup, phanerozoic marine, paleontology, silurian, early paleozoic, bivalves, t j m, marine fossil record, mesozoic, extinctions, geologic, higher taxa, trilobites, permian, faunas, phanerozoic taxonomic, late ordovician, marine fossil, extinction events, department geological, phanerozoic diversity, extinction event, paleoecology, cenozoic, phanerozoic taxonomic diversity, cretaceous, standing diversity, america abstracts, j w valentine, fossils, d jablonski, devonian, d h erwin, sepkoski, j j sepkoski, geologic time scale, paleontological, extinction rates, fossil benthic, fossil marine, raup, kinetic model, origination rates, paleontologists, extinction rate, interactions recent, middle ordovician, m raup, s j gould, phanerozoic time, recent fossil, invertebrate paleontology, marine diversity, speciation extinction, earth history, facies, upper ordovician, fossil taxa, million years, patterns evolution, originations, stratigraphic record, stratigraphy, millions years, late cretaceous, paleobiology, triassic, compendium fossil, late cambrian, america special paper, economic paleontologists, harland et al, marine invertebrate, rates origination, america special, raup sepkoski, early cambrian, n l gilinsky, extinction, articulate brachiopods, abstracts programs, jurassic, geological time, stratigraphic range, late permian, late paleozoic, harland et, fossil assemblages, north american paleontological, cambrian ordovician, middle devonian, patterns taxonomic, number genera, brachiopod, stratigraphic distribution, evolution extinction

## 51 Mitochondrial genetics

mtdna, mitochondrial dna, haplotypes, j c avise, mitochondrial, mitochondrial dna evolution, mtdna haplotypes, r m zink, sequence divergence, animal mitochondrial, mitochondrial dna variation, mtdna variation, avise et al, haplotype, animal mitochondrial dna, c wilson, mtdna sequence, dna evolution, cytochrome b, genetic distances, mitochondrial dna sequence, genetics systematics, genetic divergence, bridge population, dna bridge, mitochondrial dna bridge, analysis mtdna, control region, mitochondrial genome, mtdna data, restriction endonucleases, variation mitochondrial, genetic distance, molecular evolutionary genetics, phylogeography, analysis mitochondrial, n c saunders, dna variation, mtdna sequences, phylogeographic patterns, nucleotide diversity, patterns mitochondrial, species concepts, patterns mtdna, evolution animal, mitochondrial dna differentiation, mitochondrial dna sequences, population genetics, mtdna lineages, mtdna haplotype, mtdna divergence, human mitochondrial, terms restriction, evolutionary genetics, studying genetic variation, dna differentiation, molecular evolution, restriction endonuclease, human mitochondrial dna, mtdnas, speciation process

## 52 Tort law

strict liability, negligence, contributory negligence, negligent, tort liability, tort, tort law, liability rules, accident costs, tort system, liability insurance, accidents, held liable, law torts, products liability, personal injury, damages, torts, liability rule, injuries, injurer, costs accidents, liability negligence, liability, injured, negligence strict, liable, due care, product liability, accident, accident law, imposing liability, liability tort, comparative negligence, liability based, accident victims, injuries caused, liability imposed, fault, strictly liable, journal legal, reasonable care, liability system, liability fault, negligence rule, plaintiff, automobile accidents, res ipsa, personal injuries, theory strict, impose liability, pain suffering, injury, standard care, insurer, absolute liability, liability has, contributory, defendant, medical malpractice, liability cases, level care, liability only, defective products, law negligence, injurers, liable only, accident prevention, automobile accident, injured person, modern tort, defense contributory, negligence standard, liability law, imposition liability, insurers

## 53 Turtles

turtles, turtle, painted turtles, chrysemys picta, carapace, slider, carapace length, freshwater turtles, plastron, painted turtle, plastron length, species turtles, turtle species, m harless, turtles have, chelydra serpentina, common snapping, harless h, r w barbour, snapping turtles, turtle populations, hatchlings, tortoises, aquatic turtles, hatchling turtles, sea turtles, slider turtle, turtles collected, turtles captured, snapping turtle, h morlock, j m legler, marginal scutes, female turtles, hatchling, turtle eggs, turtles had, c picta, number turtles, scutes, sea turtle, j l greene, sternotherus odoratus, snapping, pseudemys scripta, desert tortoise, green turtle, pseudemys scripta troostii, turtle chrysemys picta, painted, j w gibbons, handbook turtles, marking turtles, r j brooks, neotropical slider, loggerhead sea

## 54 Social movements

social movements, social movement, resource mobilization, social movement organizations, social protest, movement organizations, mobilization revolution, mobilization social, mayer n, frontiers social, development black, movement participation, mayer n zald, social movement theory, activists, strategy social, protest, social movement research, collective action, mobilization, collective behavior, civil rights movement, political opportunities, resource mobilization theory, richard cloward, political opportunity, cycles protest, morris carol, mobilization theory, partial theory, mccarthy zald, new social movements, social movement organization, conflict social, robert d benford, carol mcclurg, john d mccarthy, movement organization, theory collective, rights movement, international social movement, piven cloward, dynamics social, collective violence, political opportunity structure, zald john, riots, black insurgency, n zald, perspectives social, grievances, protest activity, social conflict, frames cycles, political protest, mayer zald, movement participants

## 55 Accounting

accounting research, accounting review, journal accounting, accounting research vol, institute professional, accounting economics, accounting review vol, financial statements, financial reporting, earnings share, financial accounting, earnings announcement, earnings forecasts, earnings announcements, accounting income, accounting earnings, quarterly earnings, reported earnings, forecasts earnings, financial statement, financial accounting standards, professional accounting, earnings forecast, annual earnings, contemporary accounting research, disclosures, extraordinary items, accounting standards board, information content, unexpected earnings, sfas, sample firms, statement financial, accounting standards, evaluation accounting, printed usa, compustat, workshop participants, accounting principles, accounting information, earnings management, analyst forecasts, forecast errors, research accounting, disclosure, accounting numbers, accounting methods, accruals, changes accounting, institute certified, accounting literature, analyst forecast, earnings, actual earnings, fasb, eps, ball brown, market reaction, earnings announcement date, american accounting association, net income, certified public, income statement, forecasts, incremental information content, future earnings, financial analysts, annual earnings announcements, fiscal year, content annual, generally accepted accounting, earnings forecast errors, earnings changes

## 56 Congressional elections

congressional elections, house elections, incumbency, incumbents, incumbency advantage, legislative studies quarterly, seats, choice congressional, reelection, elections, previous election, campaign spending, challengers, open seats, senate elections, competition congressional, general election, house incumbents, house members, samuel kernell, congressional candidates, advantage incumbency, republican incumbents, house races, electoral, incumbent, incumbents have, congressional districts, decline competition, effects campaign, state legislative elections, journal politics, jacobson kernell, democratic incumbents, election outcomes, midterm congressional, incumbency congressional, election year, election results, election, politics congressional, effect incumbency, democrats, house seats, challenger quality, congressional election, voters, number seats, districts, challenger, vote received, house candidates, congressional quarterly weekly, incumbents challengers, redistricting, american politics quarterly, republicans, open seat, vote share, house representatives, parties congressional, strategy choice, incumbents running, congressional quarterly press, electoral success, quality challengers, vanishing marginals, seats votes, midterm, american political science, legislative elections, congressional, midterm congressional elections, presidential vote, money congressional, partisan, republican candidates, relationship seats, congressional vote, democratic candidates, senate races, state legislative, jacobson, republican, democratic republican, incumbent running, constituency service, election years, seeking reelection, spending house, challenger spending, electoral advantage, political science review, campaign expenditures, congressional district, congressional quarterly, votes, dodd bruce, margin victory, higher office, republican incumbent, midterm elections, running reelection, party control, major party

## 57 Plant pathogens

disease resistance, hypersensitive response, plant disease resistance, pseudomonas syringae, defense responses, systemic acquired resistance, pseudomonas syringae pv, hypersensitive, plant disease, salicylic acid, systemic acquired, pathogen, tobacco mosaic, tobacco mosaic virus, arabidopsis, plant defense responses, defense response, transgenic plants, resistance response, plant defense, oxidative burst, avirulent, elicitor, arabidopsis thaliana, plant cell, disease resistance genes, pathogen infection, p syringae, resistance arabidopsis, acquired resistance, avirulence gene, cell death, resistance tobacco, programmed cell death, resistance genes, r genes, hypersensitive cell death, pathogen attack, resistance gene, elicitors, society plant, response tobacco, reactive oxygen, avirulence, gel blot analysis, tomato, tobacco, hypersensitive reaction, disease resistance gene, signal transduction, tobacco plants, pr proteins, ethylene, transgenic tobacco, pathogens, defense genes, oxygen species, r gene, inoculation, days inoculation, tobacco leaves, fungal pathogen, salicylic, plant cells, bacterial pathogen, pr genes, pr gene expression, transgenic, rna gel blot, defense gene, reactive oxygen species, necrotic lesions, signal transduction pathway, response pathogen, active oxygen species, pr gene, peronospora parasitica, p syringae pv, cladosporium fulvum, activation defense, oxidative, total rna, leaves inoculated, inoculated leaves, plants inoculated, enhanced resistance, powdery mildew, arabidopsis mutant, induction systemic, disease symptoms, programmed cell, disease resistance response, role salicylic, infiltrated, virulent, trends plant sci, plant physiologists, plant defense response, mosaic virus, bacterial pathogens, plant hypersensitive, plants expressing, syringae pv tomato, active oxygen, bacterial, cauliflower mosaic virus, transgenic tobacco plants, pto, avirulence genes, resistance plants, hypersensitive cell, tobacco viral, rna gel, inoculated, gene expression, resistance p, signal transduction pathways, fungal, levels sa, confers resistance, fungal elicitor, phytophthora infestans, j d g, infected leaves, thaliana, sa accumulation, pathogen pseudomonas syringae, resistance pseudomonas, pathogen recognition, arabidopsis plants, cauliflower mosaic, systemic resistance, induce systemic

## 58 Option pricing

pricing options, call option, option pricing, options corporate, option prices, call options, rational option, black scholes, contingent claims, exercise price, option price, structure interest, corporate liabilities, term structure, european call, underlying stock, valuation options, put option, time maturity, put options, underlying asset, maturities, brennan schwartz, partial differential equation, stochastic differential, american options, strike price, hull white, option pricing model, european call option, stochastic volatility, contingent claim, early exercise, maturity date, european options, partial differential, options alternative, call put, volatilities, bond prices, option pricing models, rational option pricing, pricing, alternative stochastic, maturity t, cox ross, option values, volatility, call price, bond price, option valuation, american call, stochastic differential equation, put call, american option, american put, implied volatility, options stochastic, expiration date, european option, pricing contingent, option contracts, time expiration, blackscholes, implied volatilities, discount bond, equilibrium characterization, price time, expiration, interest rate, pricing interest, yield curve, european put, arbitrage, short rate, hedging, brownian motion, bond pricing, geometric brownian motion, option value, pricing corporate, pricing formula, futures options, stochastic volatility models, term structure models, derivative securities, interest rate process, instantaneous variance, interest rates

## 59 Consumer behavior

translog, demand equations, demand systems, demand system, elasticities, elasticities substitution, demand functions, price elasticities, share equations, total expenditure, almost ideal demand, linear expenditure, budget shares, flexible functional, system demand, demand analysis, engel curves, ideal demand system, consumer demand, deaton, income elasticities, flexible functional forms, systems demand, linear expenditure system, cost function, budget share, separability, input prices, slutsky, deaton muellbauer, generalized leontief, weakly separable, demand elasticities, expenditure system, berndt, agricultural economics association, partial elasticities, homogeneous degree, american agricultural economics, weak separability, derived demand, translog cost function, translog cost, commodity groups, elasticities demand, share equation, indirect utility function, indirect utility, translog function, translog model, pollak wales, linear homogeneity, price income, elasticity estimates, degree zero, factor demand, almost ideal, prices income, expenditure elasticities, substitution elasticities, elasticity substitution, cost shares, m fuss, homogeneity symmetry, homothetic, frontiers quantitative, engel, complete system, symmetry restrictions, price index, functional forms, cost share, berndt christensen, elasticity

## 60 Mathematics education

mathematics education, research mathematics, american educational research, teaching learning, learning mathematics, american educational, council teachers, teachers mathematics, instructional, educational studies, learners, mathematics teaching, teaching mathematics, journal research, school mathematics, learner, learning teaching, teacher, classrooms, classroom, problem solving, review educational, cognitive science, handbook research, mathematical knowledge, science education, students learn, teachers, psychology mathematics, educational research, students use, instruction, journal educational, how students, students had, mathematical problem solving, situated cognition, mathematics, mathematics instruction, mathematics learning, research science, help students, curriculum, learning environments, mathematical thinking, conceptual understanding, science mathematics, mathematics science, standards school, students do, curriculum evaluation, students have, teaching, mathematical concepts, mathematical problem, teacher education, studies mathematics, students did, elementary school, conceptual change, student learning, students develop, constructivist, evaluation standards, students work, teachers students, students engage, students used, research teaching, mathematical ideas, students make, students asked, instructional design, classroom practice, science teaching, students worked, culture learning, thinking learning, how teachers, d groups, learning environment, asked students, students need

## 61 Salt marsh ecology

salt marshes, salt marsh, spartina alterniflora, marshes, marsh, spartina, alterniflora, s alterniflora, salinity, new england salt, salt, marsh surface, england salt marsh, high marsh, tidal, salt marsh vegetation, marsh vegetation, tidal marshes, salt marsh plants, spartina alterniflora loisel, marsh plants, spartina patens, soil salinity, georgia salt, low marsh, halophytes, georgia salt marsh, marsh sediments, north carolina salt, coastal salt, estuary, growth spartina, coastal marshes, marsh soils, salinities, ecology halophytes, s patens, salt marsh plant, plant zonation, tidal inundation, distichlis spicata, effects salinity, alterniflora north, tidal marsh, salt marsh ecosystem, j m teal, salt deserts, marshes salt, coastal salt marshes, r j reimold, salt marsh sediments, salt tolerance, juncus roemerianus, salicornia, marsh species, sulfate reduction, e d seneca, salt marsh grass, carolina salt marsh, forms spartina, sediment, coastal wetlands, estuarine, tidal water, reimold w, pore water, effect salinity, salt marsh species, tides, valiel et al, tidal range, salicornia europaea, coastal marine, coastal marsh, sulfide, high salinity, j reimold, estuarine coastal, height forms, spartina alterniflora marsh, water salinity

## 62 Extracellular matrix

fibronectin, extracellular matrix, integrin, cell adhesion, integrins, adhesion, e ruoslahti, cell attachment, fibronectin receptor, laminin, collagen, extracellular, cell spreading, plasma fibronectin, focal adhesion, vitronectin, cell migration, adhesion receptors, focal adhesions, adhesion fibronectin, family cell, endothelial cells, cells fibronectin, integrin receptors, extracellular matrix proteins, adherent cells, integrin subunit, fibronogen, cell surface receptors, integrin subunits, basement membrane, adhesive, integrin family, focal contacts, tyrosine phosphorylation, human plasma, adhesion spreading, focal adhesion kinase, human plasma fibronectin, k m yamada, human fibronectin, matrix proteins, cell surface, cell surface glycoprotein, attachment spreading, receptors, vitronectin receptor, laminin receptor, platelets, ecm, integrin receptor, m d pierschbacher, ligand, fibroblasts, k burridge, receptor, c buck, wells coated, f horwitz, domain fibronectin, laminin fibronectin, signaling cell, r o hynes, basement membranes, integrin function, adhesion extracellular, cell binding, cell adhesion receptors, adhesion migration, binding fibronectin, adhesion assays, vinculin, ligand binding, integrin signaling, ligands, extracellular matrices, adhesions, site fibronectin, platelet, rgd, talin, adhesion cells, endothelial cell, mab, coated, fibronectin laminin, collagen type, cellular adhesion, attached cells, surface glycoprotein, pbs, extracellular matrix components, adhesion receptor, integrin activation, attachment cells, type iv collagen, type collagen, dishes coated, extracellular matrix molecules, cytoskeleton, promote cell, m e hember, surface receptors, rockefeller university, interaction fibronectin, fibronectin vitronectin, attachment fibronectin, human endothelial cells, matrix components, affinity chromatography, binding site, monoclonal antibodies, cells attached, integrin expression, journal cell, receptor laminin, platelet membrane glycoprotein, fragment fibronectin, cells adhere, glycoprotein properties, melanoma cells, fak, cell surface receptor, activity fibronectin, receptors extracellular, von willebrand factor, monoclonal antibody, r timpl, von willebrand, inhibition cell, collagen fibronectin, adhesion molecules, fibronectin cell, r l juliano, growth factors, plates coated, leukocyte adhesion, cell adhesion molecules, plated, leukocyte, adhesion human, adhesion plaques, t springer, identification isolation, antibodies, cell attachment activity, adhesion kinase, fibronectin purified, fibronectin binding, cells plated, binding soluble, cytoplasmic domain, role cell, attachment activity, tyrosine kinases, fibronectin receptors, tyrosine kinase, signal transduction, fibronectin collagen, adhesion collagen, nonadherent cells, rgd sequence, ecm proteins, fibronectin human, sonnenberg, normal transformed, peptide, endothelial, focal contact, cells detached, antibody, coated fibronectin, stress fibers, v quaranta, adhesion sites, described materials, mabs, fibronectin has, adhesive properties, regulation cell, allowed adhere, jolla cancer research, abbreviations used, immunoprecipitated

## 63 Radiation mutagenesis

rights reproduction, cells irradiated, irradiation, form reserved, irradiated, dose rate, ionizing radiation, chinese hamster cells, x rays, radiation damage, radiosensitivity, cell survival, irradiated cells, radiation response, dose, radiation research, cell killing, potentially lethal damage, time irradiation, lethal damage, hamster cells, potentially lethal, survival curve, surviving fraction, doses, survival curves, ionizing radiations, repair potentially, chromosome aberrations, chinese hamster, radiation sensitivity, m m elkind, m elkind, immediately irradiation, radiation biology, rbe, inc rights, radiation dose, sublethal damage, mammalian cells, radiobiology, x irradiation, repair sublethal, irradiations, radiation, repair, chromosomal aberrations, radiation research society, unirradiated, cells irradiation, radiosensitive, cells exposed, y rays, mammalian cells grown, damage repair, radiations, cultured mammalian, postirradiation, plating efficiency, cell cycle, heavy ions, unirradiated cells, low doses, dna synthesis, cultured mammalian cells, dose rates, rejoining, linear energy transfer, response mammalian, rays, repair processes, radiation effects, chromosome damage, relative biological effectiveness, dna damage, s phase, synchronized chinese hamster, repair dna, human cells, extrapolation number, mitotic delay, neutrons, fraction cells, elkind h, synchronized chinese, absorbed dose, repair radiation, division delay, lethal radiation damage, charged particles, aberrations induced, strand breaks, function dose, t terasima, terasima l, energy deposition, cells vitro, dosimetry, damage induced, irradiation cells, grown culture, survival cells, relative biological, potentially lethal radiation, plateau phase, high let, effects ionizing, radiation research societyintroduction, biological effectiveness, surviving fractions, doses x, chromosome breaks, prior irradiation, doses radiation, division cycle, heavy ion, effect radiation, radiotherapy, total dose, dna repair, radioresistant, exponentially growing, mammalian cell, tumor cells, aberrations, surviving cells, m kellerer, survival level, effects radiation, cells repair, radiation therapy, repaired, cultures irradiated, kellerer h, densely ionizing, damage surviving, cell population, low dose, inhibition dna, dual radiation action, radiation doses, gamma rays, dual radiation, alpha particles, fast neutrons, deoxyribonucleic acid, hela cells, ionization, cellular radiation, cell survival curves, department radiation, induced ionizing, survival levels, phillips l, surviving chinese hamster, surviving chinese, times irradiation, doubling time, w k sinclair, beam, late s, radiation quality, curves cells, damage mammalian, plating, dose delivered, lesions, radiation action, number cells, dose radiation, rad, sublethal, dna strand breaks, colony formation, lethal damage repair, cells culture, repair process, aberrations human, radiobiology cultured, potentially lethal lesions, k sinclair, rate dna, cell progression, radiations living, lethal lesions, ionizing, sinclair r, responses hela, repair kinetics, higher doses, premature chromosome condensation, radiation survival, h irradiation, survival curves obtained, cellular radiosensitivity, linear energy, ataxia telangiectasia, ascites tumor cells, induction chromosome, pld repair, elkind g, f q h, dose range, irradiated cell, repair mammalian, dicentrics, breaks induced, r phillips, repair pld, cells s, energy deposited, sublethal potentially, generation cycle, radioresistance, curves obtained, accelerated heavy ions, w c dewey, radiations different, rads, rbe values, radiosensitivity mammalian, postirradiation incubation

## 64 Congressional voting

roll call, roll calls, congressional voting, legislative studies quarterly, roll call votes, party leaders, committee assignments, congresses, house representatives, roll call voting, party leadership, majority party, democrats, committee system, legislative behavior, republicans, call votes, house members, party voting, congressmen committees, rules committee, congressional quarterly, southern democrats, committees, legislator, house senate, standing committees, votes, congressional party, congressmen, howard rosenthal, minority party, committee assignment, party members, senators, committee members, legislative process, american political science, midwest journal, voting patterns, constituency characteristics, legislative voting, ways means, journal politics, poole rosenthal, party government, congressional, roll, electoral connection, democrats republicans, voting behavior, house democrats, cox mccubbins, house committees, legislators, postreform, dodd bruce, congressional parties, influence congress, appropriations, constituency, lawrence c dodd, parties leaders, voting records, c dodd, members congress, appropriations committee, bills, mathew d, voting, partisan, americans democratic, legislative organization, postreform house, number roll, democratic caucus, party cohesion, senate, northern democrats, congressional behavior, mathew d mccubbins, congressman, political science review, democratic members, leadership congress, party loyalty, committee assignment process, model legislative, democratic action, legislative roll call, conservative coalition, republican, final passage, congressional committees, committees congress

## 65 Private international law

conflict laws, foreign law, domicile, choice law, private international law, domiciled, full faith, faith credit, private international, lex, own law, credit clause, situs, lex loci, lex fori, apply own, apply law, logical legal, domicil, local law, proper law, domiciliary, legal bases, sister state, foreign state, forum state, foreign court, contract made, renvoi, conflicts law, law applicable, restatement conflict, new york court, place contracting, personal jurisdiction, law conflict, forum, service process, law govern, forum law, application foreign, applicable law, forum has, col l rev, cause action, conflicts rules, forum non conveniens, law applied, forum non, interstate international, law governing, place performance, personam, jurisdiction, action brought, plaintiff, defendant, foreign judgments, de droit international, conflicts laws, york court, decedent, sued, place injury, applying law

## 66 Bats

bat, bats, roost, insectivorous bats, myotis lucifugus, species bats, roosts, big brown, eptesicus fuscus, myotis, roosting, bats have, bats captured, echolocation, number bats, brown bats, study bats, big brown bat, big brown bats, bat species, m lucifugus, maternity colonies, vespertilionid bats, brown bat, cave, echolocation calls, m b fenton, w h davis, ecology bats, r m r, caves, bats america, bats had, species myotis, t h kunz, bat activity, bats found, journal mammalogy, maternity colony, bats have been, young bats, individual bats, bats collected, roost sites, bats observed, lucifugus, m r barclay, mist nets, hibernating bats, roosting ecology, tadarida brasiliensis, roosting foraging, bats did, bats use, bats taken, bats present, bats flying, vespertilionid, behavioral methods, flight bats, maternity roosts, numbers bats, e fuscus, mammalogy vol

## 67 Sociology of religions

study religion, review religious, religious research, scientific study, church attendance, sociology religion, denominations, churches, religious commitment, religiosity, religious participation, religion, denomination, church, church membership, religious, rodney stark, religious beliefs, denominational, religious involvement, congregations, church members, american religion, catholics, protestants, protestant, attend church, religious groups, religious change, religious affiliation, journalfor scientific, religious behavior, church participation, protestant denominations, religion has, secularization, religious services, religious organizations, religious belief, congregation, levels religious, mainline, effects religious, new religious, religious life, church growth, religions, rutgers university press, theory religion, religious institutions, clergy, american religious, religiously, catholic, attendance, conservative protestant, god, bible, wade clark, evangelical, religious preference, mainline protestant, study religious, nature religious, conservative protestants, differences religious, conservative churches, relationship religious, measures religious, religion table, effect religious, organized religion, psychology religion, theology, protestantism, christian, religious group, religious activity, frequency church, william mckinney, religious factor, catholic church, churching, attendance religious, religion society, theological, finke stark, religious activities, sociologists religion, catholicism, religious experience, religion america, baptists, measure religious, denominational affiliation, patterns religious, influence religious, religious identity, religious traditions, protestant churches, stark bainbridge, relationship religion, christianity, religion have, david roozen, consequences religious, level religious, understanding church growth, role religion, charles y, united church, religious economy, church america, roof mckinney, religious movements, model religious, secular, religious socialization, liberal protestant, religious market, southern baptist, beliefs practices, congregational, sacred canopy

## 68 Snakes

snakes, snake, snake species, snakes captured, snakes collected, species snakes, snakes have, garter, garter snakes, s s novak, snake populations, number snakes, female snakes, common garter, adult snakes, snakes found, snakes had, male snakes, thamnophis sirtalis, water snakes, cro-talus viridis, r seigel, individual snakes, vipera berus, garter snake, rattlesnakes, australian elapid, male combat, small snakes, australian elapid snakes, water snake, thamnophis, colubrid snakes

## 69 Bears

black bears, black bear, grizzly bears, cubs, grizzly bear, bear population, bear populations, grizzly, brown bears, bear research, bear habitat, bears have, bears captured, brown bear, conference bear, yellowstone, female bears, black bear population, bears had, number bears, grizzly bear population, females cubs, bears northeastern, bear management, yellowstone grizzly, bears killed, black bear populations, yellowstone national, female black bears, individual bears, grizzlies, grizzly bear habitat, denning, bears yellowstone, cub, bears did, bears, dens, polar bears, bears have been, yellowstone national park, bears used, yellowstone grizzly bear, bear ecology, male bears, den, bear use, captured bears, yellowstone grizzly bears, bear hunting, northeastern minnesota, bears observed, american black bears, bear habitat use, craighead et al, m r pelton, interagency grizzly bear, first premolar, berry crop, biology management, cub survival, cementum annuli, adult bears, premolar tooth sections, bear activity, bears north, bears using, female black, female grizzly bears, ecology black, mast berry, female black bear, yellowstone ecosystem, first premolar tooth, american black bear, den emergence, bear density, supply kinship, grizzly bear populations, effects mast, large mammal populations, female grizzly, northwestern montana, grizzly bear study, yearlings, research management, berry crop failures, glacier national, winter dens, fish game, grizzly black, bears first, cementum layers, den sites, mountains national park, bears located, smoky mountains national, brown bear population, bear mortality, aging black bears, black bear habitat, bear behavior, bear cubs, bears found, grizzly bear management, denning ecology, american black, bears humans, jonkel cowan, denned, movements black, bears known, bears do, bears moved, success black, bears feeding, mct, bears cementum, northern interior grizzly, bears idaho, young bears, denning period, large mammal, dynamics black, black bear ecology, hunters, used bears, grizzly bear recovery, management grizzly, crop failures, kinship social, dynamics large, bears southwestern, male black bears, foot snares, bear distribution, management bears, bear population dynamics, marked bears, black bear workshop, age determination, garbage dumps, bears monitored, northern interior

## 70 Mayan studies

maya, classic maya, classic period, late classic, archaeology, maya lowlands, ancient maya, lowland maya, de antropologia e, ceramics, american archaeology, mesoamerica, archaeological, society american, teotihuacan, settlement patterns, nacional de antropologia, early classic, obsidian, field archaeology, mesoamerican, valley mexico, postclassic, maya area, antropologia e historia, maya civilization, aztec, middle american, handbook middle, tikal, ceramic, preclassic, middle american research, archaeological record, peabody museum, late preclassic, excavations, prehistory, archaeological research, prehistoric, settlement pattern, peten, museum archaeology, archaeological data, pottery, archaeologists, archaeological investigations, spanish conquest, late postclassic, basin mexico, olmec, late classic period, archaeological evidence, central mexico, carnegie institution, journal field, copan, peabody, complex societies, latin american antiquity, instituto nacional de, southern maya, yucatan, middle preclassic, central mexican, terminal classic, civilization, archaeology ethnology, belize, valley oaxaca, early postclassic, excavation, archaeological sites, valley, maya archaeology, aztecs, bureau american, highland, prehistoric settlement patterns, highlands, maya sites, prehistoric settlement, late formative, guatemala, prehispanic, archaeological method, sherds, school american, ceremonial, anthropology, classic maya civilization, r e w, department anthropology, new mexico press, guatemalan, maya site, classic postclassic, burials, late classic maya, postclassic period, middle formative, plaza, mayan, craft specialization, american anthropological, de las cosas, las cosas de, gordon r, conquest, southwestern journal, new world archaeological, journal anthropological, monte alban, northern belize, ceramic production, de cultura maya, cultural ecology, settlements, maya society, estudios de cultura, maya settlement patterns, early mesoamerican, journal anthropology, southern maya lowlands, cultural evolution, teotihuacan valley, sabloff, oaxaca, chiefdoms, early classic period, j e s, center archaeological, ceramic sequence, formative period, maya community, instituto, archaeological study, ancient, publications anthropology, belize valley, ceremonial center, excavated, anthropological research, lowlands, maya settlement, altar de, chichen itza, monumental architecture, new mexico, instituto nacional, mounds, surface collections, gordon r willey, late terminal, archaeologist, ruins, prehispanic settlement patterns, ethnohistoric, ceremonial centers, university oklahoma, origins maya, anthropological archaeology, radiocarbon dates, subsistence, northern yucatan, early formative, texcoco, foundation anthropological, material culture, advances archaeological, lowland maya settlement, j eric s, exchange systems, highland guatemala, san lorenzo

## 71 Childhood development

society research, research child, child development, preschool, early childhood, child outcomes, child behavior, home environment, early intervention, child psychology, parenting, home observation, children families, behavior problems, developmental outcomes, cognitive development, socioemotional development, home environments, infant development, social competence, development children, handbook child, parenting practices, young children, early childhood research, parenting behavior, monographs, observation measurement, early childhood programs, journal child, preschool years, inc rights, outcomes children, biennial meeting, infants, child family, peabody picture vocabulary, preschool children, school readiness, maternal employment, preschool programs, hardship black, toddlers, language development, child development table, quality child, effects early, school achievement, early childhood intervention, mothers children, peabody picture, child adolescent, effects maternal, intervention programs, maternal education, family child, economic hardship, effects child, early child, disadvantaged children, parent education, home visits, mothers had, infant behavior, early child care, head start, applied developmental, bayley, mothers, early education, early cognitive, children mothers, abnormal child, bayley scales, child care, mothers reported, family processes, child care research, children risk, school performance, preschoolers, early school, early childhood education, child characteristics, scales infant, home visit, social development, care research network, early childhood development, parenting behaviors, iq scores, black families, parent child

## 72 Spiders

spiders, spider, journal arachnology, spider species, webs, spiders collected, orb, silk, wolf spider, wolf spiders, spiders have, egg sacs, spiderlings, species spiders, arachnology table, number spiders, egg sac, prey capture, biology spiders, orb web, spiders found, spider webs, spider fauna, orb webs, spider size, arachnology, web building, spiders had, wolf, spider community, spiders connecticut, web construction, female spiders, adult spiders, chelicerae, web, spider populations, nephila clavipes, american spiders, spider communities, cephalothorax, spinnerets, lycosids, lycosid, spiders used, ecophysiology spiders, distribution spiders, orb weavers

## 73 Chloroplast biology

chloroplasts, thylakoid, photosystem, photosystem ii, thylakoid membranes, thylakoid membrane, chlamydomonas reinhardtii, thylakoids, chloroplast, photosynthetic electron, psii, c reinhardtii, reaction center, isolated chloroplasts, photosynthetic electron transport, chlamydomonas, electron transport, spinach, spinach chloroplasts, chloroplast proteins, chloroplast membranes, plastids, intact chloroplasts, large subunit, reinhardtii, green alga chlamydomonas, reaction centers, photosystem ii reaction, chloroplast protein, plastoquinone, chloroplasts isolated, photosynthetic, psba, electron flow, chloroplast development, chloroplast membrane, stroma, chlorophyll, ii reaction center, higher plant, mutants chlamydomonas, electron transfer, psii reaction, photosystems, chloroplast gene expression, thylakoid membrane proteins, electron transport chain, stromal, chl, biochim biophys acta, small subunit, mutant chlamydomonas, chloroplast envelope, psi, protein photosystem, chloroplast genes, regulation chloroplast, chloroplast ribosomes, pea chloroplasts, plastid, higher plant chloroplasts, psii reaction center, ribulose biphosphate

## 74 Topology

homotopy, cohomology, homomorphism, homotopy groups, isomorphism, commutative, spectral sequence, homotopic, commutative diagram, mathematical society volume, homotopy type, exact sequence, steenrod, american mathematical, induces isomorphism, hopf, isomorphic, american mathematical society, homotopy equivalence, generator, isomorphisms, homomorphisms, abelian, space x, direct sum, generators, abelian group, fibration, homotopy classes, identity map, functor, natural map, cohomology groups, commutes, induced map, homotopy class, steenrod algebra, mod, map f, stable homotopy, homology groups, naturality, let x, simplicial, homotopy theory, topological, epimorphism, finitely generated, classifying space, spectral sequences, induces map, s eilenberg, fibre, simply connected, mod p, topological space, prime p, mathematics subject classification, map induced, group g, abelian groups, homeomorphism, algebras, tensor product, homeomorphic, subcomplex, map x, same homotopy, commutativity, hurewicz, cohomology class, base point, define map, odd prime, hopf invariant, polynomial algebra, let e, tensor, torsion, prove theorem, manifolds, homology cohomology, short exact, homotopy group, monomorphism, let g, inclusion map, subalgebra, algebraic topology, injective, hopf algebra, homotopy equivalent, x e, loop space, homology theory, same homotopy type, thom, direct summand, algebra, has homotopy, completes proof, short exact sequence, consider diagram, exists map, automorphism, integers, let k, classes maps, natural isomorphism, contractible, cohomology group, mathematics vol, j h c, exact sequences, ideal generated, direct limit, homomorphism induced, classifying spaces, bockstein, quotient, free abelian, cocycle, vector space, cohomology theory, adams spectral sequence, functors, cohomology ring, theorem, cyclic group, induces homomorphism, exterior algebra, lie group, main theorem, map g, lemma, topological spaces, annals mathematics

- 75 Medical outcomes medical outcomes study, medical outcomes, health status, health status measures, functional status, medical care volume, health status measure, sickness impact, qual life res, j clin epidemiol, quality life, measurement health, life patients, physical functioning, life research, general health, primary care, framework item, sickness impact profile, et al medical, item selection, measure health, status measures, health states, health serv res, new england medical
- 76 Environmental toxicology environ health perspect, environmental health perspectives, polychlorinated biphenyls, pcbs, toxicol appl pharmacol, estrogenic, dioxins, estrogen receptor, estrogen, environ contam toxicol, toxicol environ health, j toxicol environ, estrogens, pcb, estrogenic activity, exposure polychlorinated, polychlorinated biphenyl, tcdd, human exposure, pcb congeners, environmental chemicals, endocrine disruptors, body burden, environmental health, arch environ contam, exposure pcbs, arch environ health, estradiol, estrogenic effects, ddt, crit rev toxicol, declare have, biphenyls, estrogen receptors, dioxin, adipose tissue, authors declare, human breast, prenatal exposure, human health, j steroid biochem, environmental estrogens, environmental contaminants, sci total environ, competing financial interests, environ toxicol chem, related compounds, organochlorine, endocrine disruption, levels pcbs, organochlorine pesticides, utero, competing financial, breast milk, environ sci technol, organochlorine compounds, j ind med, human milk, aryl hydrocarbon, fundam appl toxicol, pcb exposure, blood levels, occupationally exposed, estrogenicity, contaminants, pcb levels, health effects, organochlorines, pesticides, exposed polychlorinated, bull environ contam, utero exposure, polychlorinated, bisphenol, dibenzofurans, serum levels, health perspectives articles, environmental exposure, developmental effects, human breast cancer, dioxins related, chemicals, thyroid hormone, toxicol ind health, workers exposed, xenoestrogens, estrogenic chemicals, perinatal exposure, am j ind, rats exposed, chlorinated, pcds, ah receptor, risk assessment, institute environmental, have competing, endocrine, polychlorinated dibenzofurans, wildlife humans, alterations sexual, biochem mol biol, steroid biochem mol, occup environ med, female rats, humans wildlife, male rats, human health effects, j natl cancer, am j epidemiol, dde, levels organochlorine, natl cancer inst, postnatal exposure, breast cancer cells, occupational exposure, rats, hormone concentrations, toxic equivalency factors, sperm counts, exposed pcbs, pcbs have, pcb concentrations, estrogenic compounds, substances disease, sexual functional, body burdens

## 77 Sociology education

teaching sociology, introductory sociology, instructor, sociology courses, semester, instructors, professor sociology, undergraduate sociology, sociological concepts, sociological imagination, sociology course, students have, introductory course, sociology students, courses, undergraduate, undergraduate education, ask students, sociology majors, classroom, sociology departments, faculty members, students write, critical thinking, course material, help students, class discussion, students learn, course content, teaching, students see, give students, sociology curriculum, encourage students, introductory sociology courses, sociology, active learning, address correspondence, introductory sociology course, introductory courses, students take, introductory, introduction sociology, students do, college classroom, students think, student, sociology classes, sociologists, teaching resources center, student evaluations, majors, sociology major, college teaching, sociological knowledge, sociology department

## 78 Art education

art education, studies art, art educators, national art education, visual arts, teaching art, art education association, art teachers, works art, work art, journal issues, artists, art history, art criticism, artist, aesthetic, aesthetic education, national art, aesthetics, arts, art teacher, study art, art curriculum, professor art, journal aesthetic, history art, art instruction, art art, field art, research art, aesthetic experience, arts education, artistic, education art, educators, painting, contemporary art, making art, issues research, art has, approach art, research national art, art educators have, theory art, nature art, art education copyright, education copyright, art forms, visual art, school art, art work, art programs, curriculum, learning art, art education has, understanding art, art appreciation, aesthetics art, studio, knowledge art, art teaching, approaches art, art educator, art experience, visual, art works, art program, artwork, artworks, getty center, fine arts, research national, paintings, art objects, art students, how art, art object, criticism art, art have, students art, teach art, creative mental, teachers, art classes, use art, teacher, role art, art classroom, curriculum development, philosophy art, art activities, development art

## Test of asymmetry between behavioral and biological fields

If behavioral fields  $i$  have a larger cultural hole to biology fields  $j$  than vice versa, then  $C_{ij} < C_{ji}$  on average. We identified 893 of 899 pairs of fields that satisfied this inequality. If the probability that this inequality holds for each pair is 50 percent, then the probability of observing 893 or more is roughly  $10^{-258}$  (binomial sign test). However, this test is not sufficient because the pairs of fields are not independent from one another—each behavioral field, for example, contributes 31 pairings toward the 899 total. To circumvent this, we could sample a biological field without replacement and match it to a behavioral science field, producing 29 pairs that are independent. This process could be repeated many times to produce a distribution of probabilities that the data were generated under the null hypothesis (50 percent chance to observe the inequality). However, because only six pairs of fields violated the inequality (presuming worst-case that those six come from distinct fields), then at the extreme, 23 of 29 pairs would uphold the inequality. A binomial sign test reveals that this extreme is also significant with a probability of 0.0005. A sign test that corrects for the nonindependence between pairs of fields would therefore produce a 100 percent rejection of the null hypothesis.

## Stop word list and trigram data

Trigram counts for each paper in the corpus were generated by JSTOR using an optical character recognition (OCR) algorithm applied to electronically scanned scientific papers. Trigrams preserve the structure of most phrases (see discussion in the “Data and Methods” section of the main text). Because the number of raw trigrams is extremely large, we removed a word in each trigram if it matched a stop word in our list (shown following). This process generates “reduced” trigrams, which we also included in our analysis. For example, “the markov chain” and “markov chain and” were reduced to “markov chain.” Phrases were intentionally not stemmed, so that equivalent phrases, when used in different contexts and tenses, nevertheless contribute to the jargon calculations. For example, “biogeographical unit” and “biogeographic unit” are the same concept,

but the former is the convention in some journals and among British biogeographers. However, we found that the choice of language model is largely based on preference. Differences in parsing methodology, so long as they are reasonable, contribute little toward the jargon barrier measure.

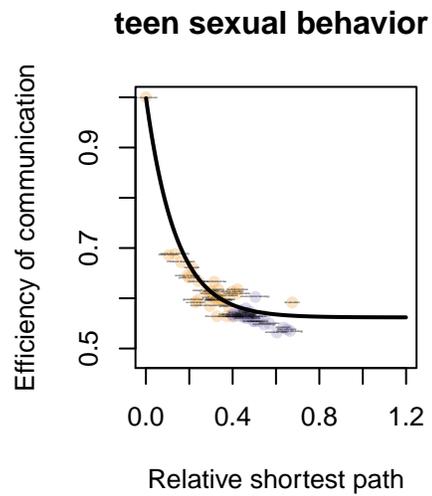
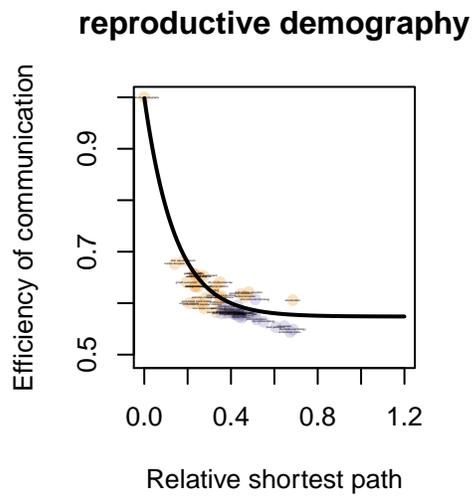
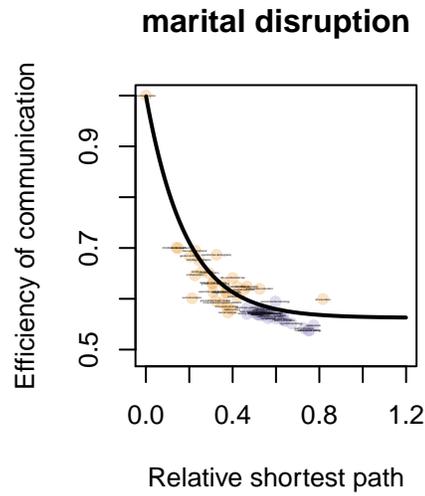
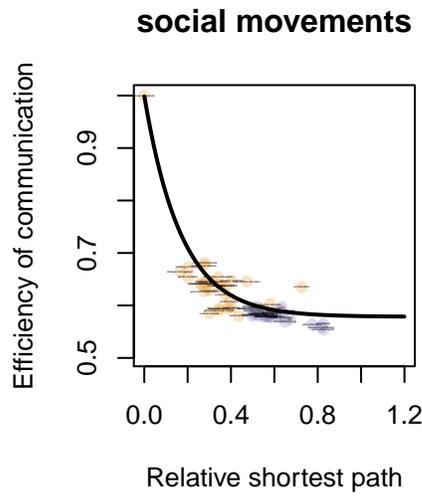
Full list of stop words: a, aboard, about, above, absent, accordingly, across, after, against, ahead, albeit, all, along, alongside, although, also, amid, amidst, among, amongst, an, and, another, anti, any, anybody, anyone, anything, around, are, as, aside, astraddle, astride, at, bar, barring, be, because, before, behind, below, beneath, beside, besides, between, beyond, both, but, by, can, certain, circa, concerning, consequently, considering, could, dare, despite, down, does, during, each, either, enough, every, everybody, everyone, everything, except, excepting, excluding, failing, few, fewer, following, for, from, given, he, hence, her, hers, herself, him, himself, his, however, i, is, if, in, including, inside, into, it, its, itself, less, like, little, loads, lots, many, may, me, might, mine, minus, more, most, much, must, my, myself, near, neither, nevertheless, no, not, nobody, none, nor, nothing, notwithstanding, of, off, on, once, one, onto, or, other, ought, our, ours, ourselves, out, outside, over, part, past, pending, per, plus, regarding, respecting, round, save, saving, several, shall, she, should, since, so, some, somebody, someone, something, such, than, that, the, their, theirs, them, themselves, then, thence, therefore, these, they, this, tho, those, though, through, throughout, thru, thus, till, to, toward, towards, under, underneath, unless, unlike, until, unto, up, upon, us, versus, via, wanting, we, what, whatever, whenever, whichever, where, whereas, wherever, whether, which, when, without, would, yet, you, will, were, with, within, your, while, whilst, who, whoever, whom, whomever, whose, yours, yourself, yourselves.

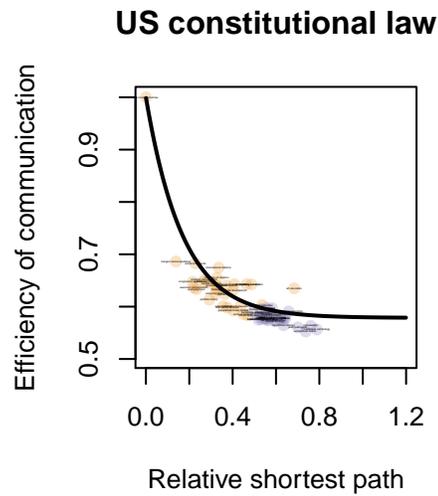
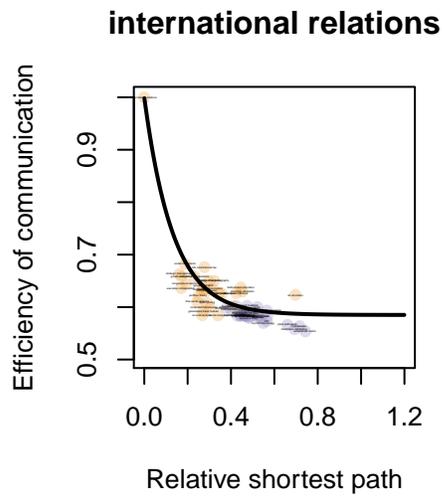
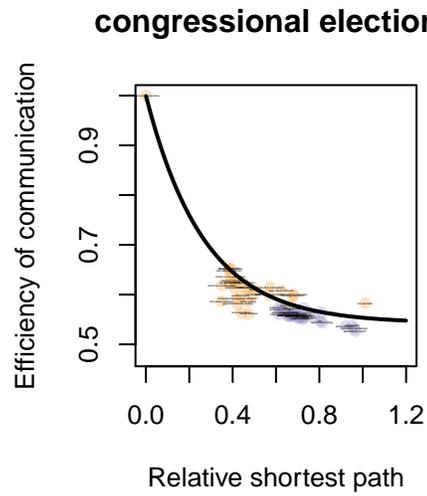
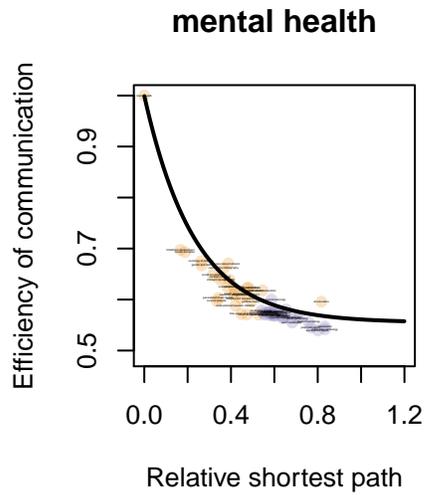
## Distance data

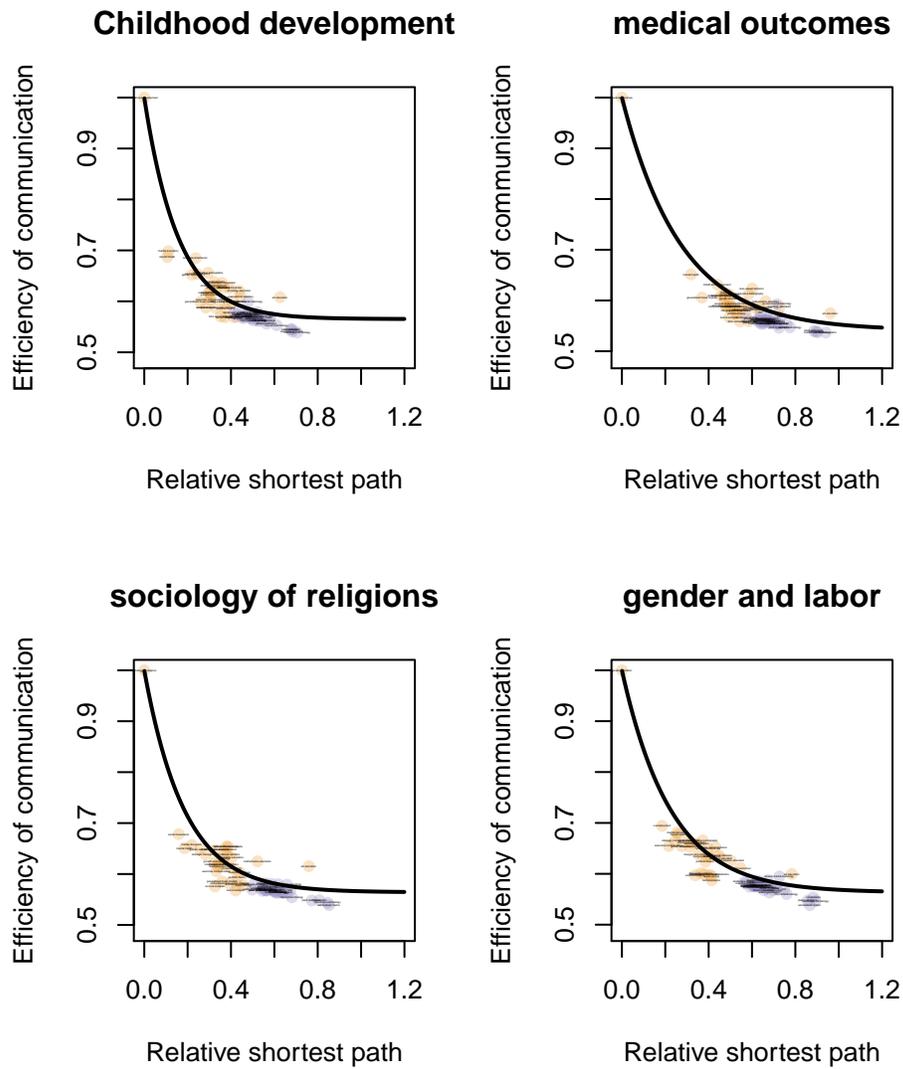
Data used for analysis (shortest path and jargon matrices) are available in the Dryad data repository.

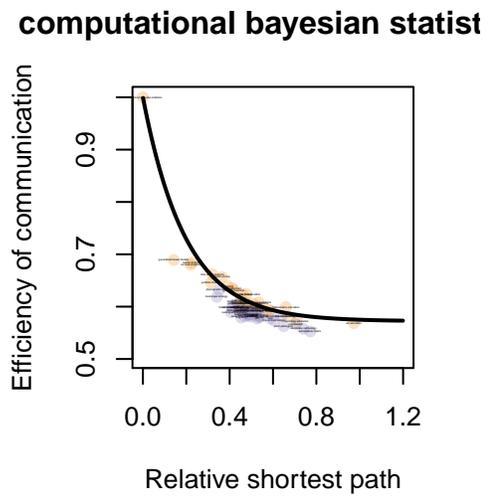
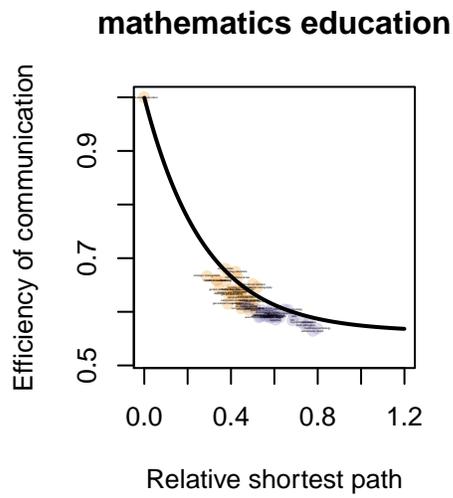
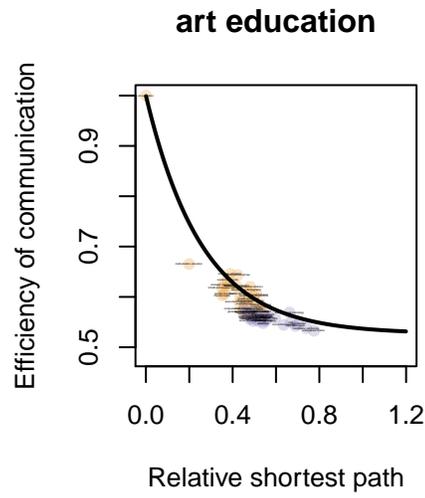
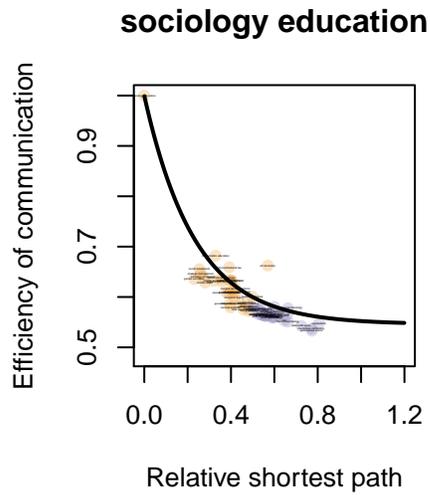
## **Decay plots for all fields**

The full list of decay plots for each of the 60 fields we studied in JSTOR is given in Figures 1-15.

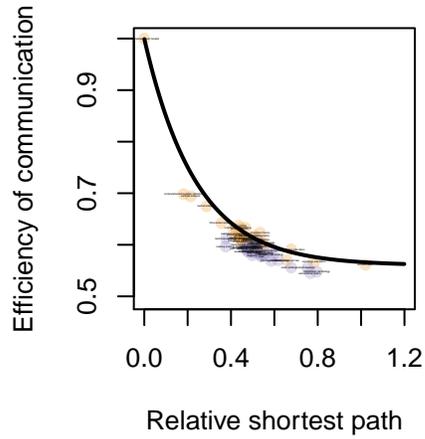




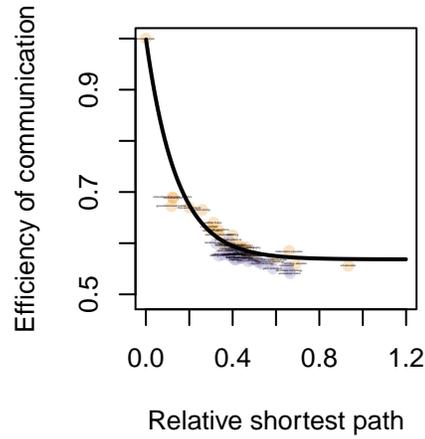




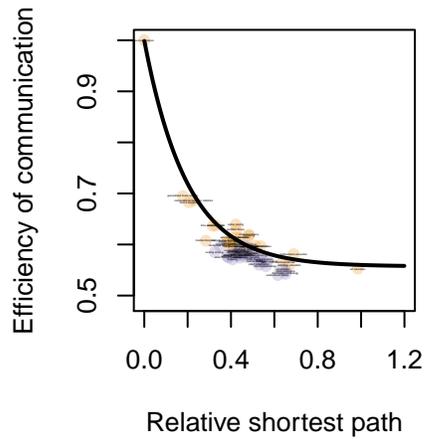
**generalized linear models**



**kernel analysis**



**survival analysis**



**time series analysis**

