paperscape

flavour physics
neutrinos
high energy experiment
(hep-ex)
beyond standard model
extra generation
parton distributions
dark matter
high energy phenomenology
(hep-ph)
supersymmetry
lattice gauge theory
nuclear experiment
(nucl-ex)
extra dimensions
quantum chromodynamics
high energy lattice
(hep-lat)
heavy ions
amplitudes
string phenomenology
extra dimensions
dark matter
astrophysics
cosmology
astrophysics
(astro-ph)
cosmic microwave background
dwarf stars
inflation
gamma-ray bursts
extrasolar planets
dark energy
high energy theory
(hep-th)
general relativity/quantum cosmology
(gr-qc)
black holes
quantum gravity
mathematical physics
(math-ph)
mathematics
(math)
spin glass
networks
quantitative finance
(q-fin)
condensed matter
(cond-mat)
graphene
quantum physics
(quant-ph)
quantum mechanics
quantitative biology
(q-bio)
statistics
(stat)
superconductivity
computer science
(cs)

Paperscape.org

A project by **Damien P. George** and **Rob Knegjens**

Paperscape is an interactive map that visualises the arXiv, an open, online repository for scientific research papers. The map, which can be explored online by panning and zooming, currently includes all 880,000+ papers from the arXiv and is updated daily.

Each scientific paper is represented in the map by a circle whose size is determined by the number of times that paper has been cited by others. A paper's position in the map is determined by both its citation links (papers that cite it) and its reference links (papers it refers to). These links pull related papers together, whereas papers with no or few links in common push each other away.

Papers are coloured according to their scientific category. As a result coloured "continents" are seen to emerge, such as theoretical high energy physics (blue) or astrophysics (pink). At their interface one finds cross-disciplinary fields, such as dark matter and cosmological inflation. Looking within a continent reveals substructures representing more specific fields of research.

References (and citation counting) are extracted by processing the TeX/LaTeX and PDF source obtained from the arXiv. Currently some categories (noticeably hep-th and hep-ph) have better reference extraction than others and so the map for these areas has more variation in paper size and more structure.

Colour coding:
High Energy Theory [hep-th]; **High Energy Phenomenology [hep-ph]**; **High Energy Experiment [hep-ex]**; **General Relativity/Quantum Cosmology [gr-qc]**; High Energy Lattice [hep-lat]; **Astrophysics [astro-ph]**; Condensed Matter [cond-mat]; **Quantum Physics [quant-ph]**; **Physics [physics]**; **Mathematics [math]**; Computer Science [cs]; Other