

Research Methodology

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How and where to find information

Books

 Browsing (often)

 Mentioned by colleagues or supervisor (sometimes)

 Cited in other books or journal articles (rarely)

Journal articles

 Same as above, but in order 3 (very often), 2 (sometimes), 1 (very rarely)

Preprints

 Same as above, but in order 1 (almost always), 2 (occasionally), 3 (very rarely)

 All three types of sources can be found by searching on the internet

Sources on the net

👁 Search engines

- 👁 Google ...

- 👁 How many other search engines can you name without searching on Google?

- 👁 Many search engines note the country of origin

- 👁 Let us test these ...

👁 Wikipedia

- 👁 Open authorship compromises on reliability and usefulness

- 👁 More examples in social science than in science, but ...

Sources on the net

- 👁 Google scholar
 - 👁 Not always easy to find the right article
 - 👁 Search rules obscure
 - 👁 Citations not always reliable
 - 👁 Registration (verified email) also not reliable
 - 👁 Exhaustive

Sources on the net

- 👁️ inspirehep (for HEP/GR/ASTRO)
 - 👁️ Search syntax has to be followed
 - 👁️ Selection by librarians
 - 👁️ Quite exhaustive
- 👁️ Web of Science
 - 👁️ Not free
 - 👁️ Selection by publisher staff
 - 👁️ Only published articles in certain journals
 - 👁️ Limited
 - 👁️ Also ambiguous?

Tips for searching

- ◇ Use keywords
- ◇ Author names or uncommon words for precise searches
- ◇ More words for wider searches
- ◇ Narrow down by adding words
- ◇ Widen out by looking at citations
- ◇ Don't ignore serendipitous discoveries

Sources on the net

- 👁 Arxiv, biorxiv, medrxiv ... (for preprints)
 - 👁 Dependent on people uploading
 - 👁 Extremely popular, especially in some fields
 - 👁 Most convenient for browsing
- 👁 Researchgate, academia ... (registration required)
- 👁 Scihub (for journal papers)
- 👁 Libgen (for books)
- 👁 Court cases over the last two