Database and VO Lab

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We will practice viewing, downloading and analyzing common-use astronomy data stored in databases such as from ADS, arXiv (scientific literature), NED, Simbad (object reference), MAST, SDSS and GAIA (photometry and spectroscopy data). Along the way we will use virtual observatory tools such as TopCat, Aladdin/VizieR etc.

Session 1:

- Practical session on literature searches in ADS and arXiv
- Practical session on Object searches in SIMBAD and NED: the meaning of the plots

Session 2:

- Practical session on the use of Aladdin/Vizier
- Practical session on the use of the MAST database

Session 3:

- Practice with SDSS and/or GAIA data

Software:

- Web browser
- Java
- Aladdin: https://aladin.u-strasbg.fr/
- Topcat: http://www.star.bris.ac.uk/~mbt/topcat/
- Python with libraries astropy /numpy/

Notes: I can expand or contract the course depending on the availability of slots assigned and the previous knowledge of the students on these topics.