

Title: Tapping into the ADS with Python

Concepts involved: manipulation of lists, 2D plots (line, scatter, histogram), basic data fitting

Abstract:

The astroquery module allows to easily query the ADS with Python. Here, I propose to use this module to assemble a simple script that computes one's publication statistics automatically. The tasks involved (list manipulation, basic plotting) are ideal for beginners and intermediate users to develop their programming skills. Advanced users may use the datasets involved to explore a range of data manipulation and fitting routines. The goal is for every participant to go home with a fully working script able to automatically update their publication statistics.

Packages required:

matplotlib, astroquery, numpy

Packages possibly useful:

dateutil, datetime, scipy, astropy, statsmodels