SCIENCE WITH THE VIRTUAL OBSERVATORY

AMELIA BAYO

ABSTRACT. The amount of public archival data available and multiwavelength all sky survey missions are changing the way astronomical research is done. Although detailed studies on individual objects are of course necessary, the development of new tools and methodologies that ease the analysis of large amounts of multiwavelength data in homogeneous and efficient ways is becoming mandatory. In this context, already in the early 2000 a world-wide philosophy was born: the "Virtual Observatory" that on the base of standardization of the data formats and data transfer protocols seeks to maximize the time for "real" science. In this talk I will give a brief introduction on how the Virtual Observatory was born and I will illustrate how useful it is with a number of published science papers based on this philosophy.

ESO Fellow at Max-Planck-Institut fuer Astronomie, Germany. $E\text{-}mail\ address: bayo@mpia-hd.mpg.de}$