

Photometry and the Virtual Observatory

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Abstract

Building Spectral Energy Distributions combining data from different sources is becoming more important as astronomy takes an increasingly multi-wavelength approach. In order to do this, photometry data must be described in sufficient detail to allow for the conversion to compatible flux density units (including the description of magnitude systems and zero points). Furthermore, comparing observed photometry with the synthetic one for theoretical models allows to infer physical properties from the observed objects. But in order to do that, an even more detailed description of the observed photometric points is needed, including the transmission curves of the filters corresponding to the observed data. In the Virtual Observatory an important effort has been done towards this standardization with the Photometry Data Model. And in the SVO we have developed several services to help in this direction, providing detailed information about filters, synthetic photometry for theoretical models and tools to use all this to analyze observed data and estimate object physical properties.