

Transient photometric classification: an astronomical data challenge

jeudi 29 mars 2018 14:25 (20 minutes)

Among the many challenges imposed by the next generation of large scale astronomical surveys, the classification of transient sources is arguably one of the biggest obstacles to be overcome before we can exploit the full potential of these new instruments. Although most of the standard astrophysical transient studies rely on high resolution spectroscopic observations, the new surveys will mostly deliver low resolution photometric measurements. Machine learning methods are then expected to overcome this sample selection bias providing reliable photometric classifications. In order to have an up to date picture of how different methods behave in this scenario, a new simulated data set is being developed - which will allow machine learning methods to be tested in a controlled environment. Moreover, PLAsTiCC (Photometric LSST Astronomical Time-series Classification Challenge) also aims to be a fertile ground for the development of new approaches based on LSST requirements. In this talk I will discuss the motivations and goals behind this data challenge and give details on how the broader community can engage in the challenge.

Orateur: ISHIDA, Emille (LPC-UBP)