Profile Asymmetries

Deg Nathan*[1]

[1]Queen's University – Canada

Abstract

The ability to automatically characterize line profiles is vital in modern surveys. There are a number of standard measurements, such as profile width, systemic velocity, and integrated flux. One other common measurement is the lopsidedness, which measures the ratio of the approaching and receding fluxes. This statistic is often used to characterize the asymmetry of a profile and to identify merger candidates. In recent work, we have introduced two other asymmetry measurements that can be used to characterize profiles. These statistics are also sensitive to mergers and other galaxy disrupting processes. In this talk I will explore these three asymmetry statistics in both simulations and observations and show how both their limits and their power in characterizing profiles.

*Speaker