

Abstract

The formation of the central regions of disk galaxies that we call galactic bulges remains a debated topic in modern galaxy evolution.

In this respect, the bulge of the Milky Way offers a unique opportunity to investigate in detail the role that different processes (secular evolution, dynamical instabilities, hierarchical merging, dissipational collapse etc..) may have played in the Galaxy formation and evolution. Indeed, it is only in the bulge of the Milky Way that all stars can be individually resolved, allowing to correlate the global structural properties of the bulge with the characteristics of its stellar population, such as age, chemical content, and kinematics. However, this advantage comes with the need of covering a large area on sky (~ 500 sqdeg). In this respect, large observation programmes and surveys are now providing a global view of the bulge stellar population properties that can be used to constraint formation and evolution models.

I will review our current understanding of the three-dimensional structure, chemical composition, age and kinematics of the bulge as obtained from recent photometric (e.g. VVV/X, OGLE) and spectroscopic (e.g. BRAVA, ARGOS, GIBS, GES, APOGEE) surveys.