Galactic bulges, especially 'pseudo-bulges', can be built either by satellite accretion or by secular internal evolution. In this latter case one of the well studied mechanisms is the evolution of barred galaxies. Barred galaxies can produce both disk-like bulges and triaxial boxy/peanut bulges. Based on what is already known from numerical simulations, we have started a project to model with NMAGIC these type of bulges and thereby obtain the 3D mass and orbital distribution in the inner regions of disk galaxies, and constrain their evolutionary history by comparing with simulations.

**Figure 1.** Edge-on view of galactic bulges produced by an evolving stellar bar. The boxy shape in bulges appears generally after the first buckling instability and the boxy/peanut bulge after the second buckling event (Martinez-Valpuesta et al. 2006).

**Figure 2.** 2D kinematics of a simulated galaxy, evolving from pure disk through bar and buckling instability.

Stellar bars in N-body numerical simulations evolve with time from a flat bar to a boxy/peanut bulge through two buckling instabilities. These N-body simulations can be the starting point for the 3D modeling with NMAGIC (De Lorenzi et al. 2007). There will be three main steps:
- Understanding the modeling of rotating triaxial systems.
- Applying the modeling to galaxies with good observational data (long slit data, IFU data and individual stellar velocities) such as M31 and the Milky Way.
- Comparing the 3D orbital structure with evolutionary models as those presented in Figures 1 & 2.

**References:**