

Seminarium Astrofizyczne

wtorek 21.01.2020 godz. 12:30
ul. Pasteura 7; sala 404

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Galaxies and their dark matter halos

In the standard cosmological model (Λ CDM) baryonic components of galaxies, in form of stars, gas and dust, are thought to be embedded inside the dark matter (DM) haloes. This dark matter component is dominant and as such drives the evolution of the large-scale structure of the Universe.

Unfortunately, as for now, we can't directly observe dark matter, and we have to rely on models/simulations describing dark matter halo shapes and distribution. These models are based upon assumptions and some of them are known to be oversimplified.

During my talk I will show how simple, yet commonly used assumption, of spherical symmetry of dark matter halo influence the results obtained in Halo Occupation Distribution (HOD) model framework. And how we need to improve the dark matter halo shape description in order to reach the high precision measurements.

Serdecznie zapraszam,
Agnieszka Majczyna