Seminarium Astrofizyczne
wtorek 14.11.2023 godz. 15:30
ul. Pasteura 7, sala 404

transmisja on line
https://meet.goto.com/NCBJmeetings/seminarium-astrofizyczne
Password: AstroSemi

Michael Walmsley
(University of Toronto, Canada)

Reshaping Galaxy Zoo for the Deep Learning Era

For the last 15 years, Galaxy Zoo has recruited online volunteers to classify the morphology of millions of galaxies. But Galaxy Zoo is changing. In this talk, I introduce the models we now use to predict how volunteers would describe a galaxy, and consider what these models mean for astronomers.

One clear consequence is scale; our latest catalog, Galaxy Zoo DESI, includes all 8.7M well-resolved galaxies in the DESI Legacy Surveys. But models also allow for entirely new science. They are easily adaptable to new surveys and new tasks, allowing anyone to make exactly their own morphology measurements. The models automatically flag unusual galaxies and make personalised suggestions for which unusual galaxies you might be most interested in. And our latest models (first presented here) can identify which pixels belong to spiral arms or bars. Applying our volunteer-powered models to Euclid and Rubin images, and combining the resulting measurements with ancillary data from DESI spectra and IFU surveys, will reveal how morphology influences galaxy evolution.

Serdecznie zapraszam,
Margherita Grespan, on behalf of the SOC