**Seminarium Astrofizyczne**

wtorek 5 listopada, 12:30

ul. Pasteura 7, sala 404

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**Dr. Gergely Dálya**

*(L2IT, IN2P3, France)*

**GLADE catalogues for EM follow-up and cosmology**

Galaxy catalogues are invaluable tools for finding the electromagnetic counterpart of gravitational-wave events since the targeting of known galaxies can speed up the follow-up effort considerably. These tools are also needed for doing cosmology with gravitational waves. The gravitational wave provides the distance of the source, while the information of the host galaxy (or the list of possible host galaxies) gives the redshift, the other quantity necessary to measure the Hubble constant. In this talk, I will present the GLADE galaxy catalogues, which have been used by the LIGO-Virgo-KAGRA Collaboration to measure the Hubble constant and highlight the newest, largest catalogue, UpGLADE, which will be used in the upcoming cosmological analysis. These huge galaxy databases can naturally be used for other purposes as well, for example, various groups use the GLADE catalogues to localise FRBs, GRBs, and other EM transients, as well as high-energy neutrinos.

Serdecznie zapraszam,
Sreekanth Harikumar, on behalf of the SOC