



ID de Contribution: 27

Type: **Oral presentation**

The dusty torus surrounding NGC 1068's active nucleus observed with GRAVITY

jeudi 27 février 2020 16:15 (15 minutes)

A significant number of Active Galactic Nuclei (AGN) are known to be heavily obscured: the strong UV-X emission arising from the accretion disk and the associated broad emission lines cannot be directly observed. It is now commonly accepted that this obscuration is due to a structure surrounding the central engine, called the *dusty torus*. This torus is known to be made of gas and dust, to be clumpy and to be parsec-scale.

I present my modelling of NGC 1068's dusty torus, constrained with a GRAVITY observation. This instrument is incredibly well designed for such a study: its spectral range (K band, 2.0 - 2.4 microns) is very sensitive to the hot dust at ~1500K which is present in the inner region of the torus, and more importantly its incredibly high angular resolution (up to 4 mas) allows to fully resolve the dusty torus.

Our analysis reveals a structure significantly different from what was expected.

Field

Not in the above

Auteur principal: VERMOT, Pierre (LESIA)

Orateur: VERMOT, Pierre (LESIA)

Classification de Session: Talk

Classification de thématique: Astrophysics