

## Bollettino Settimanale

Lunedì 18 marzo 2024	Martedì 19 marzo 2024	Mercoledì 20 marzo 2024	Giovedì 21 marzo 2024	Venerdì 22 marzo 2024
		<p><b>AULA CONVERSI ore 16.00</b> <b>SEMINARIO DI ASTROFISICA</b></p> <p><b>Foreground removal in the upcoming CMB polarization data.</b></p> <p><i>Larissa Carlos de Oliveira Santos</i> <i>(Center for gravity and cosmology (CGC), Yangzhou University/Yangzhou, China)</i></p> <p>Multi-frequency observations are needed to separate the CMB from foregrounds and accurately extract cosmological information from the data. In the past decades, many ground-based, balloon- borne and satellite experiments have been dedicated to CMB observations. The latest results from the Planck satellite achieved a precise measurement not only for temperature anisotropies, but also for CMB polarization E-modes. As an outcome of these experiments, much cosmological information has already been extracted from the CMB. Recently, much attention has been focused on the CMB polarization anisotropies, especially the B-modes, which are of particular interest as they are expected to probe inflation. However, a precise measurement of these B-modes strongly depends on our ability to separate the signal from the astrophysical foregrounds. In this seminar, I will discuss the foreground cleaning performance considering CMB polarization experiments, mainly in the context of the Chinese ground-based Ali CMB Polarization Telescope.</p>		