GRAvitational-waves Science&technology Symposium (GRASS 2022)



Monday, 6 June 2022 - Tuesday, 7 June 2022 Palazzo Moroni, Padova

Scientific Programme

Optical coatings

New materials, crystalline, cryogenic, new ideas, higher order modes applications.

Invited speaker: Prof. Jean-Pierre Locquet (KU Leuven)

Title: Crystalline oxides for mirror coatings

Stray light

Modeling, characterization, monitoring, mitigation Invited speaker: Dr Myriam Zerrad (Institut Fresnel)

Title: Light scattered by high performance optical components: Numerical prediction and accurate

metrology

Wavefront sensing and control

Sensing and control, mode matching, aberrations, application to higher-order-modes interferometry. Invited Speaker: Antonio Perreca (University of Trento, TIFPA-INFN)

Title: Wavefront sensing and control in Gravitational Wave detectors

Data analysis

Overlapping signals identification, multi-detector, multi-messenger Invited Speaker: Brynmor Haskell (CAMK PAN, Warsaw)

Title: Probing fundamental physics with continuous gravitational waves

Other challenges for future GW detectors

Invited speaker: M. Leonardi, National Astronomical Observatory of Japan,

Title: Crystalline mirrors for GW detectors