Session Program

13-14 Oct 2022





Belgian-Dutch Gravitational Wave Meeting 2022

Theory and Astrophysics

Het Pand, Vergaderzaal 2.3 August Vermeylen Onderbergen 1, 9000 Ghent, Belgium

Friday 14 October

13:50 **Theory and Astrophysics** Session | Location: Het Pand, Vergaderzaal 2.3 August Vermeylen, Onderbergen 1, 9000 Ghent, Belgium | Convener: Tanja Hinderer 13:50-14:00 Modelling neutron star matter Speaker Prasanta Char 14:00-14:10 Black hole multipoles in higher-derivative gravity Speaker Pablo Antonio Cano 14:10-14:20 Searching higher-derivative extensions to GR in black holes' ringdown Speaker Simon Maenaut 14:20-14:30 Nonlinear effects in the black hole ringdown: absorption-induced mode excitation **Speaker** Pablo Bosch 14:30-14:40 Tidally perturbed isolated horizons Speaker Ariadna Ribes Metidieri 14:40-14:50 The motion of test bodies in curved spacetime and its applications to GWs physics Speaker Adrien Druart 14:50-15:00 Relativistic modelling of EMRIs environment Speaker Ludovico Machet Gradient corrections to the one-loop effective action for strong electroweak phase transitions Speaker Sofia Canevarolo 15:10-15:20 Gravitational waves from dark matter production Speaker

15:30

Miguel Vanvlasselaer

15:55

Theory and Astrophysics Session | Location: Het Pand, Vergaderzaal 2.3 August Vermeylen, Onderbergen 1, 9000 Ghent, Belgium | Convener: Thomas Hertog 15:55-16:05 Finding quiescent black holes in massive binaries Speaker **Hugues Sana** 16:05-16:25 How do binary stars form compact object mergers? Speaker Pablo Marchant 16:25-16:35 Forming merging double compact objects with stable mass transfer Speaker Annachiara Picco 16:35-16:45 **REMOTE: Gravitational wave spectral synthesis** Speaker Wouter van Zeist 16:45-16:55 REMOTE: SOBBH with LISA: forecasts of background and events detectability in the light of GWTC-3 Speaker Jesus Torrado

17:00