



universidade
de aveiro



CENTRO DE I&D EM MATEMÁTICA E APLICAÇÕES
CENTER FOR R&D IN MATHEMATICS AND
APPLICATIONS

Gravitational Geometry and Dynamics (GGD) Group Seminar

Dual-Frame Generalized Harmonic Gauge on Hyperboloidal Slices

David Hilditch

Instituto Superior Técnico - Lisbon

Both for studies of cosmic censorship and for practical purposes in gravitational wave astronomy, it is desirable to include future null-infinity in the computational domain. Extending formulations of general relativity known to behave well in the strong-field regime out to infinity with compactification is, however, a subtle game. In my presentation I will explain how the competition between decay of fields near infinity and growth of coefficients (due to compactification) plays out in dual-frame generalized harmonic gauge. I will discuss ongoing work towards the numerical implementation of the resulting PDEs.

Wednesday, February 23rd 2022, 14H30 || Sala Sousa Pinto + online

Zoom Meeting ID: 852 8915 0495 || <https://videoconf-colibri.zoom.us/j/85289150495>

Please contact: pvcunha@ua.pt or herdeiro@ua.pt to ask for the Zoom password

More information about the GGD group and seminars in gravitation.web.ua.pt

The GGD seminars are supported in part by the Portuguese Foundation for Science and Technology (FCT - Fundação para a Ciência e a Tecnologia), through CIDMA - Center for Research and Development in Mathematics and Applications, within project UIDB/04106/2020 and UIDP/04106/2020

FCT

Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

