

The 2nd public ExU COLLOQUIUM

December 20th (Fri.) ONLINE

TALK 17:00 - 18:00 (JST)

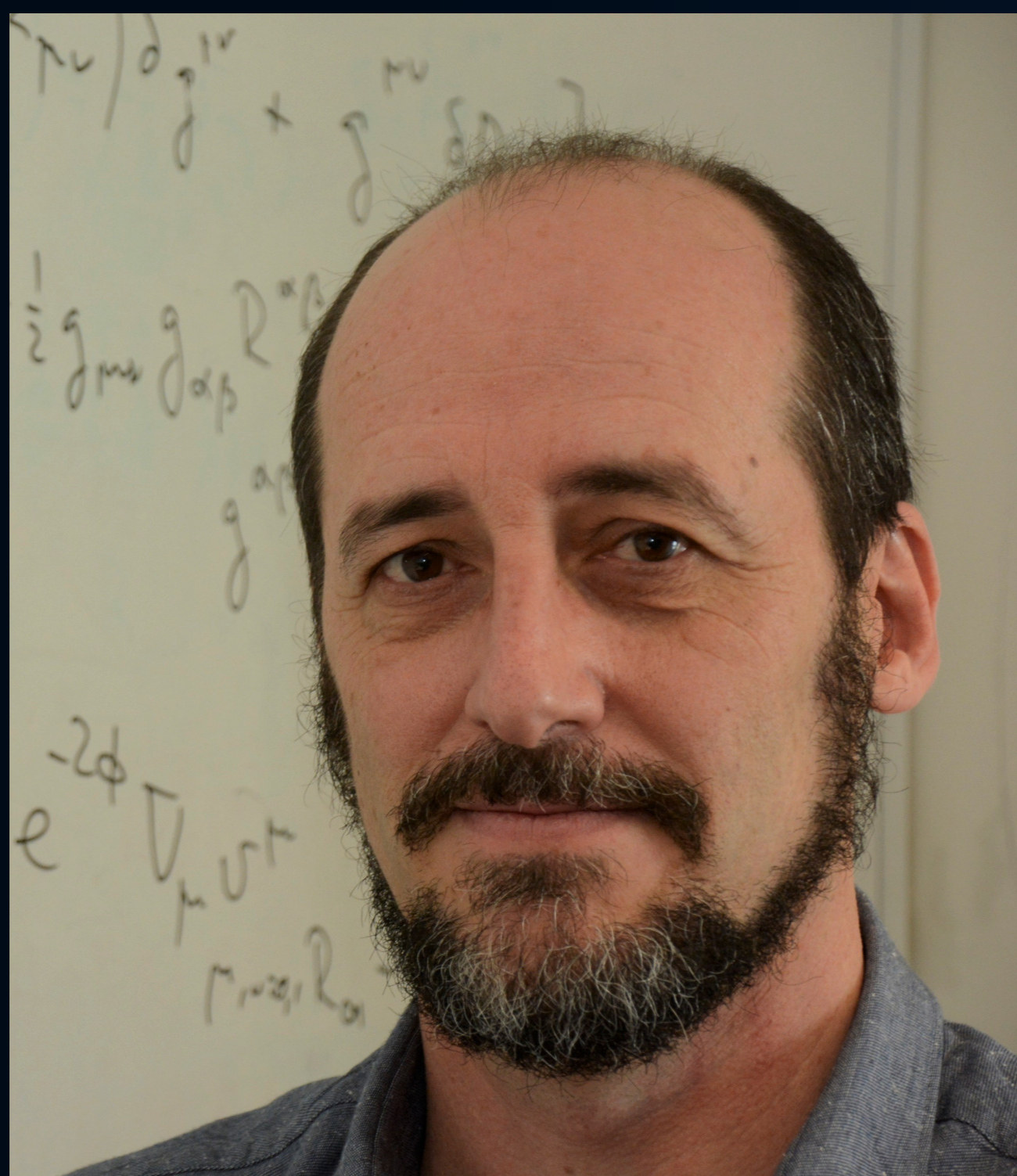
December 20th (Fri.) 9:00 - 10:00 (CET)

December 20th (Fri.) 8:00 - 9:00 (UTC)

ONLINE COFFEE TIME

18:00 - 19:00 (JST)

Registration required (click [HERE](#))



Speaker

Prof. Roberto Emparan

Universitat de Barcelona

Extreme Universe, JAPAN



MEXT -KAKENHI- Grant-in-Aid for Transformative Research Areas (A)
The Natural Laws of Extreme Universe

Quantum Black Holes as Holograms

Abstract

Quantum fields in the presence of a black hole give rise to remarkable effects, the best known of which is Hawking radiation. A consistent treatment of the backreaction effects of this radiation on the black hole is a notoriously difficult problem, but it is necessary in order to follow the process of the evaporation of the black hole. I will describe how holographic methods map this problem into a more tractable one, namely the classical dynamics of a black hole in a negatively curved spacetime (AdS) with one more dimension, and I will highlight the successes and limitations of this approach.

Extreme
Universe  2024