CMM PDE Seminar

Speaker: Isabel Cordero (Universidad de Valencia, España).

Título: Minimally implicit Runge-Kutta methods: relativistic resistive magnetohydrodynamic equations and neutrino M1 transport equations.

Abstract: In this talk I will present the minimally implicit Runge-Kutta methods. I will show their application in two different hyperbolic systems of equations with stiff source terms. On one hand, these methods have been sucessfully applied in the evolution of the resistive relativistic magnetohydrodynamic equations following Komissarov (2007) approach. On the other hand, these schemes have been also sucessfully applied in the evolution of the neutrino transport equations within the M1 closure approximation, and used in supernovae simulations. I will conclude the talk with some general remarks.

April 18, 2023 at 12 Santiago time

To be held in person at Sala de seminaries John Von Neumann CMM, 7th floor, Beauchef 851, and online via zoom:

El link para conectarse por zoom:

https://reuna.zoom.us/j/85495143837?pwd=emVTeld4bHVWQytUUitFQUxDYk9XUT09

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