

CMM PDE Seminar

Speaker: Paz Albares (Universidad de Salamanca, Spain)

Title: Integrability and the singular manifold method: a toolkit to determine soliton solutions.

Abstract: The Painlevé Property has proved to be a fruitful tool when it comes to identifying the integrability of nonlinear PDEs. The combination of this technique with the so-called singular manifold method offers an ideal framework to approach nonlinear integrable systems: it provides a systematic methodology to obtain the associated spectral problem, as well as a recursive procedure to determine soliton-like solutions. In this talk, we review the main characteristics of this setting, with applications on several examples related to Nonlinear Schrödinger equations, in which solutions as solitons and lumps are thoroughly discussed.

Modalidad: presencial en la sala de seminarios del DIM piso 5 o bien online vía zoom:

<https://uchile.zoom.us/j/81800846925?pwd=T0krYUE0YkhNbnFpN2prUGNpUU9kZz09>

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página <https://eventos.cmm.uchile.cl/pdeseminar/>

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