

CMM PDE Seminar

Speaker: Francisco Correa (Universidad Austral de Chile)

Title: Integrability, gravitation and field theories.

Abstract: The fruitful relationship between physics and integrability has been widely tested by different approaches. They appear, for example, in areas like gravitation and condensed matter physics using holographic or generating solution techniques. In this talk I will review some recent developments connecting integrable models, gravitation, non-Hermitian physics and field theories. The relationship between the AKNS hierarchy and anti-de Sitter three dimensional gravity will be discussed as well as the stability of complex solitons having real conserved quantities. Based on:

- M. Cárdenas, F. C, K. Lara, and M. Pino, Physical Review Letters, 127, 161601, 2021.
- F. C, A. Fring, T. Taira, Nuclear Physics B, 971, 115516, 2021.
- F. C, A. Fring, T. Taira, Nuclear Physics B, 2022.
- J. Cen, F.C, A. Fring, T. Taira, Physics Letters A, 435, 128060 2022.

Modalidad: Presencial en la sala de seminarios John Von Neumann, piso 7 o bien vía zoom:

<https://uchile.zoom.us/j/96160042849?pwd=SXJNVHNGYXJzWFhDZGUzZ25FazBGQT09>

Meeting ID: 961 6004 2849, Passcode: 371160

Para más información y videos de seminarios pasados, ver
página <https://eventos.cmm.uchile.cl/pdeseminar/>

Date: April 22, 2022 at 12 Santiago time

