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SEMINAR EDP

16:00 hrs.

Expositor
Pablo Miranda, (USach)

Título

Resonances in deformed tubes: twisting and bending

Abstract: In this talk we will consider an infinite straight tube and we will deform it by a periodic twisting and a local bending. On the deformed tube we will define the Laplacian and will study the existence of scattering resonances created by the deformations. We will show the existence of exactly one resonance or one eigenvalue near the bottom of the essential spectrum, depending on the strength of the twisting and the bending. We will also obtain the asymptotic behavior of the resonance/eigenvalue as a function of the bending and twisting

17.00 hrs.

Expositor
Yong Liu, (School of Mathematics, University of Science and Technology of China)

Título

Gross-Pitaevskii equation and integrable systems

Abstract: We consider the travelling wave solutions of the Gross-Pitaevskii equation in the plane. In the zero speed or subsonic region, we construct solutions using the theory of integrable systems, including KdV and KP equations.

Lunes 12 de Octubre a contar de las 16:00 hrs, Sala de Seminarios John Von Neumann CMM, Torre Norte, Piso 7, de Beauchef 851.

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