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SEMINARIO

MECÁNICA MATEMÁTICA Y PROBLEMAS INVERSOS

EXPOSITOR

Profesor
Kirill Cherednichenko
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Title:
Dispersive effective behavior of high-contrast periodic media

Abstract: I will discuss my recent work with Y. Ershova and A. Kiselev, demonstrating that spectral problems for quantum graphs with rapidly oscillating high-contrast weights are asymptotically equivalent to "homogenised'' models with energy-dependent interface conditions. We show that these asymptotically equivalent models are directly related (in the sense of Schur-Frobenius duality) to models for time-dispersive media, which in the time domain involve memory, and we characterize the corresponding time convolution kernels explicitly.

Lunes 23 de Abril a las 16h., Sala de Seminarios John Von Neuamann. Beauchef 851, torre norte, piso 7.

