

Seminario CMM- Maths&AI

Speaker: Nicolás Valenzuela (Universidad de Chile)

Title: An artificial intelligence method to find extremizers in classical Strichartz inequalities.

Abstract:

In this talk we present a new method where machine learning provides clues for the discovery of extremizers in several unsolved Strichartz inequalities appearing in classical problems of Harmonic Analysis. This method is primarily based (but not bounded to) Physics Informed Neural Networks (PINNs), with a novel use of the minimization procedure. We provide several examples of critical points and extremizers found by this method, expecting that some of them are proved as correct solutions to the theoretical minimization problem. This is joint work with R. Freire (DIM) and C. Muñoz (CMM-DIM).

Miércoles 15 de Abril 2026 a las 14:30 hrs.

Sala Maryam Mirzakhani (Multimedia) CMM, Piso 6, Beaucheff 851 Edificio Norte.

