

SEMINAR

CAPDE de EDPs

EXPOSITOR

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TITULO

Operator algebras, compact operators, and the essential spectrum of the N-body problems

Abstract: I will begin by reviewing a general method to determine the essential spectrum of Schrodinger-type operators. The method is based first on the fact that an operator is Fredholm if, and only if, it is invertible modulo the compacts (Atkinson's theorem). This reduces the study of certain quotients by the compact operators. To study the invertibility in these quotients, one uses, following Georgescu, Mantoiu, and others, a determination of the spectrum of a suitable operator algebra and of the action of the translation group on its spectrum.

I will give an example of how this method works using a natural algebra associated to the N-body problem.

This is a joint work with Victor Nistor and Nicolas Prudhon.

Lunes 23 de julio a las 17:00 hrs, en la sala de seminarios Felipe Álvarez Daziano, 5to. piso del Departamento de Ingeniería Matemática de Beauchef 851, Torre Norte.