

Seminar EDPs

Speaker: Andrew Comech, TAMU (College Station) / IITP (Moscow).

Title: Virtual levels and virtual states of operators in Banach spaces.

Abstract: Virtual levels admit several equivalent characterizations:

- (1) there are corresponding eigenstates from L^2 or a space "slightly weaker" than L^2 ;
- (2) there is no limiting absorption principle in the vicinity of a virtual level (e.g. no weights such that the "sandwiched" resolvent remains uniformly bounded);
- (3) an arbitrarily small perturbation can produce an eigenvalue.

We develop a general approach to virtual levels in Banach spaces and provide applications to Schroedinger operators with non selfadjoint potentials and in any dimension.

This is a joint work with Nabile Boussaid based on the preprint <https://arxiv.org/abs/2101.11979>

Thursday (3/25) at 4:15 pm (Chilean time).

The link for the session is:

Join Zoom Meeting

<https://uchile.zoom.us/j/83542354075?pwd=aWpod2ZNRURvdHIDYmxnT0lOWjdNdz09>

Meeting ID: 835 4235 4075

Passcode: 765052