

Thursday, May 23rd, 17:00-18:00

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RECOVERY OF SINGULARITIES IN INVERSE SCATTERING

In this talk I will introduce the backscattering inverse problem in which one tries to recover information of a potential by looking how it scatters back free plane waves.

Since the recovery of the whole potential is still an open question, many works have studied the problem of recovery of singularities, which basically consist of trying to get as much information as possible about the singular part of the potential. In the second half of the talk, we will see that under certain assumptions one can recover the singularities up to a one derivative gain in the Sobolev scale, and that in general this is the best possible result.