

Inverse Problems Network Meeting 5

Thursday, 23rd May 2019 - Friday, 24th May 2019

University of Kent

Abstract of Talk

INVERSE PROBLEMS FOR CANONICAL SYSTEMS

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For 2×2 canonical systems a Weyl coefficient can be defined in a similar way as for Sturm–Liouville equations, which is a Nevanlinna function, i.e. it maps the upper half-plane into itself. It was shown by Louis de Branges that there is one-to-one correspondence between all canonical systems (up to reparameterisation) and all Nevanlinna functions. It is the intuition that the local behaviour of the Hamiltonian at the left endpoint is related to the behaviour of the Weyl coefficient at infinity. In this talk I will present various results confirming this intuition.