



Minisymposium 15 - Operatortheorie

A Resolvent Test for Admissibility of Volterra Observation Operators

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Necessary and sufficient conditions are given for finite-time admissibility of a linear system defined by a Volterra integral equation when the underlying semigroup is equivalent to a contraction semigroup. These necessary and sufficient conditions are in terms of a pointwise bound on the resolvent of the infinitesimal generator. This generalizes an analogous result known to hold for the standard Cauchy problem.

The talk is based on joint work with Jonathan R. Partington (University of Leeds).