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Martin Adler* (maad@fa.uni-tuebingen.de), Auf der Morgenstelle 10, 72076 Tübingen, Germany. *On perturbations of generators of analytic semigroups.*

This is joint work with Miriam Bombieri and Klaus-Jochen Engel.

In a recent paper we presented an operator theoretic approach towards the Weiss-Staffans perturbation result for generators of strongly continuous semigroups. If the unperturbed semigroup is analytic, we replace the various “admissibility” conditions by simpler assumptions on the domain and range of the operators involved. The power of our main result consists in a systematic treatment of various classes of PDE’s as shown by discussing a delayed reaction diffusion equation in one space variable. (Received August 13, 2015)