Asymptotic behaviour of the Stokes-Coriolis-Ekman system

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In this talk we investigate the long time behaviour of the nonlinear Stokes-Coriolis-Ekman system on the halfspace or in an infinite layer. Of central importance are new strong stability results for the linear Stokes semigroup subject to lower order perturbations which allow furthermore to determine precise decay rates of the underlying system. Generalizations of these results to semigroups acting on arbitrary Banach spaces will be given in addition.

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