



Mathematics and CS Seminar

The spectrum of the Ekman boundary layer problem

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Host: Robert Seiringer

Originating in fluid dynamics, the study of linear stability of Ekman boundary layers leads to a spectral problem for a non-selfadjoint operator matrix family. We present new enclosures for the point spectrum of this family, thereby solving an open problem on the existence of open sets of eigenvalues in domains of Fredholmness posed by L. Greenberg and M. Marletta in 2004. Our analysis is based on a Birman–Schwinger type argument which exploits underlying similarities to Schrödinger operators. The talk is concluded by discussing possible directions of future research in this topic. Based on joint work with O. Ibrogimov and P. Siegl.

Thursday, March 21, 2024 04:15pm - 05:15pm

Heinzel Seminar Room (I21.EG.101), Office Building West, ISTA



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