



MAFIA - the seminar you can't refuse



Spectral convergence analysis for the Reissner-Mindlin system

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Trojanova 13, 12000 Praha

Abstract: The Reissner-Mindlin model for the load of a plate can be thought of as a generalization of the classical Kirchhoff-Love model that leads to a biharmonic problem. In this talk we will consider the Reissner-Mindlin system in two singular limit situations: the case of thickness going to zero, and the case of thin domains. In both cases we use the Stummel-Vainikko set up for the convergence of operators on varying Banach spaces and show that the Reissner-Mindlin operator converges to a suitable limit in the norm resolvent convergence, in particular implying the convergence of eigenvalues and spectral projections. Based on a joint work with Francesco Ferrarese.