New spectral bounds for damped systems

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In this talk we present enclosures for the spectra of operators associated with second order Cauchy problems for the case of non-selfadjoint damping. These new results yield much better bounds than the numerical range for both uniformly accretive and sectorial damping, and even in the case of selfadjoint damping. Applications e.g. to wave equations illustrate the results.

Joint work with Birgit Jacob, Carsten Trunk and Hendrik Vogt.