Reduced Basis Methods for the Wave Equation

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In this talk, we introduce energy-based error estimates for the wave equation. This is done for the second-order formulation as well as for of the corresponding first-order system. The good behavior of the online-efficient error estimators is shown for an illustrative example, keeping in mind that model reduction of parametrized hyperbolic problems is a challenge. This talk is based upon joint work with Karsten Urban (Ulm University) and Anthony Patera (MIT).