Controllability of Waves and Geometric Carleman Estimates

3rd, December

Abstract: We consider the question of exact (boundary) controllability of wave equations: whether one can steer their solutions from any initial state to any final state using appropriate boundary data. In particular, we discuss new and fully general results for linear wave equations on time-dependent domains with moving boundaries. We also discuss the novel geometric Carleman estimates that are the main tools for proving these controllability results.