Well-posedness and stabilization of energy-preserving partial differential equations

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Stability and stabilization of a class of energy-preserving partial differential equations will be studied. This class is general enough to include models of beams and waves as well as transport and Schrödinger equations with boundary control and observation. We combine an abstract functional analytical approach with the more physical approach based on Hamiltonians in order to derive easily verifiable conditions for well-posedness and stability.