

# Well-Posedness and stability in fluid-structure interaction

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We shall present a number of results (semi-group well-posedness; spectral analysis; backward uniqueness; strong and uniform stability) of a parabolic-hyperbolic Stokes-Lame coupled system arising in fluid-structure interaction. The structure is modeled by the system of dynamic elasticity (hyperbolic). It occupies a region surrounded by a fluid modeled by the stokes system (linear version of the Navier-Stokes eqts). This is joint work with G. Avalos. We shall also discuss a higher level regularity result, joint with I. Lasiecka and G. Avalos