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Igor Kukavica* (kukavica@usc.edu), **Amjad Tuffaha** and **Mohammed Ziane**. *Local well-posedness for a fluid-structure interaction model.*

In the talk we address a system of PDEs describing an interaction between an incompressible fluid and an elastic body. The fluid motion is modeled by the Navier-Stokes equations while an elastic body evolves according to an elasticity equation. On the common boundary, the velocities and stresses are matched. We discuss available results on local well-posedness and prove new existence and uniqueness results with the velocity and displacement belonging to low regularity spaces. (Received September 14, 2010)