1107-35-324　　　　**M. Ignatova\*** (`ignatova@math.princeton.edu`), **I. Kukavica**, **I. Lasiecka** and **A. Tuffaha**.
*Well-posedness for an interface damped free boundary fluid-structure model.*

We address a fluid-structure system which consists of the incompressible Navier-Stokes equations and a damped linear wave equation defined on two dynamic domains. The equations are coupled through transmission boundary conditions and additional boundary stabilization effects imposed on the free moving interface separating the two domains. First, we will discuss the local in time existence and uniqueness of solutions. In the second part, we also address the global in time existence for small initial data. This is a joint work with I. Kukavica, I. Lasiecka, and A. Tuffaha. (Received January 18, 2015)