A monolithic formulation for fluid - structure interaction

Chiang Chen-Yu
Dual degree student between
NTU (National Taiwan University) &
UPMC (Université Pierre et Marie CURIE)

Following the presentation of Olivier Pironneau, extension to 3D is presented. Various benchmark problems in 2D and 3D are compared with other experimental and computational results.

A more generalized contact condition on normal direction is also presented and tested.

At the end, I will present implementation on biomechanics, simulation of valvular motion.