

Weighted Sobolev spaces for the 3D exterior Stokes problem with Navier type boundary conditions

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In this talk, I will present some results on the three-dimensional exterior Stokes problem with the Navier slip boundary conditions, describing the flow of a viscous and incompressible fluid past an obstacle where it is assumed that the fluid may slip at the boundary.

Because the flow domain is unbounded, the problem is set in weighted spaces in order to control the behavior at infinity of the solutions.

This is a joint work with Anis Dhifaoui and Mohamed Meslameni.