

## **The effect of wall slip in 4:1 contraction flows of a PTT fluid**

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The phenomenon of wall slip has been investigated for several years by the scientific community, being most of the published work related to experimental measurements performed with the objective to evaluate the effect of slip in the velocity distribution, pressure drop or the onset of flow instabilities. Recently, the research team involved in this work has implemented in a numerical modelling code based in the Finite Volume Method the capability to model flows with the wall slip boundary condition. This code was already used to study the effect of the wall slip boundary condition on flows of Newtonian fluids in 4:1 contractions [1], using an implicit approach for the implementation of the boundary condition. In the present work the previous study is extended to model flows of viscoelastic fluids, being the code used to perform a systematic investigation of the effect of slip in the flow of a PTT fluid in 4:1 contraction, with the objective to better understand some of the phenomena related to the vortex dimensions and shape.