

Problems with p-structure: analysis and numerics

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The motion of generalized Newtonian fluids has attracted a huge research activity in the last 15 years. Motivated by this we will present some recent results concerning the existence of weak solutions for steady motions of generalized Newtonian fluids. Moreover, we will discuss results proving convergence rates for various problems with so called p-structure. In particular we will discuss Finite Element and Local Discontinuous Galerkin methods.