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## Error analysis of Banach spaces-based dual-mixed formulations of nonlinear fluid flow problems

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*Abstract:*

In this talk we present new conforming mixed finite element methods for nonlinear problems related to the Navier-Stokes equations posed on Banach spaces. The approach is based on the introduction of a pseudostress tensor as a further unknown which allows to reformulate the problem as a dual-mixed formulation where the aforementioned pseudostress tensor and the velocity become the main unknowns of the system. We also show how to extend this approach to the Boussinesq system and to Magnetohydrodynamics.

**Viernes 1 de Julio 2022, 16:20 hrs**



(Click en la figura para conectarse)

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