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Antonio Leitao* (aleitao@mtm.ufsc.br), Federal University of Santa Catarina, Department of Mathematics, Campus Universitario Trindade, Florianopolis, 88040900, Brazil. *Regularization of systems of nonlinear ill-posed equations*.

In this talk we analyze novel iterative regularization techniques for the solution of systems of nonlinear ill-posed operator equations. The basic idea consists in considering separately each equation of this system. The first technique is a Kaczmarz-type method, equipped with a novel stopping criteria. The second method is obtained using an embedding strategy, and again a Landweber-Kaczmarz approach. We prove convergence and stability of both methods.

Joint work with O.Scherzer and M.Haltmaier (Innsbruck)

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