ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

Invitation to the Doctoral Seminar

Diana-Elena Mirciu
University of Klagenfurt

"On primal-dual algorithms for ill-posed problems"

N.2.35 | Wednesday, 6 May 2026 | 10:00 a.m.

Abstract
This talk addresses the derivation of error estimates for a Condat-Vũ type algorithm that solves linear inverse problems in a stable manner. We specifically consider the setting of data perturbed by non-additive noise, and use a stopping rule to ensure accurate approximations of the solution. Furthermore, we analyze an acceleration of the Primal-Dual Hybrid Gradient (PDHG) algorithm. We again consider the framework of noisy measurements and non-quadratic fidelities, and we show that fast convergence rates can be obtained when the penalty term is strongly convex.

Elena Resmerita and the Department of Mathematics look forward to seeing you at the talk!