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# Inverse Problems Seminar

*Iterative regularization for nonsmooth inverse problems*

*Prof. Christian Clason  
University of Graz*

## Abstract

We consider inverse problems for nonlinear forward models that are directionally but not Fréchet differentiable; examples include solution mappings for nonsmooth partial differential equations or variational inequalities. In this setting, standard derivative-based regularization methods such as Landweber or Levenberg–Marquardt iteration are inapplicable. We show that using elements of the Bouligand subdifferential for the linearization still leads to a convergent regularization scheme.

Date: 17 November 2022 (Thursday)  
Time: 5:00pm – 6:00pm (Hong Kong Time)  
ZOOM link: <https://cuhk.zoom.us/j/98241093146>  
Meeting ID: 982 4109 3146

*All are Welcome*