

## **Inverse Problems Network Meeting 2**

Thursday, 23<sup>rd</sup> November 2017 - Friday, 24<sup>th</sup> November 2017

Isaac Newton Institute, Cambridge

### **Abstract of Talk**

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#### **ACCELERATION OF PRIMAL-DUAL MINIMIZATION: DETERMINISTIC VS STOCHASTIC.**

Prof A Chambolle  
CMAP Ecole Polytechnique

In this work (joint with M. Ehrhardt, C.B. Schönlieb (Cambridge) and P. Richtarik (Kaust)) I will describe the basic techniques to show convergence and accelerated convergence of primal-dual type algorithms. I will then introduce a stochastic variant of a primal-dual algorithm and show that it has essentially the same structure as its deterministic counterpart and can be accelerated in the same way, yielding, in fact, better convergence rates.