

15th November 2018, 17:30  
Seminar Room, BCAM

## Convergence in relative entropy for the linear relaxation Boltzmann equation

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I will talk about the method of hypocoercivity for showing convergence to equilibrium for spatially inhomogeneous kinetic equations. In particular I will discuss methods for showing convergence in relative entropy (which was first shown by Villani for the kinetic Fokker-Planck equation). There are challenges to adapt to work of Villani to an equation which is not regularising. I will explain how to do this for the linear relaxation Boltzmann equation and why you might want to.

$$H^1(A) + (z^n - H^1(A))(z - \delta_1)^A$$
$$H^1(A) < \dots$$