Friday 22 June 2018 – at 14:00 pm
Seminar Room “-1” – Department of Mathematics

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Optimal Besov differentiability for entropy solutions of the eikonal equations

Abstract:
In this talk I will present a recent result obtained in collaboration with Xavier Lamy (Toulouse) on the eikonal equation in a bounded planar domain.
After a brief discussion on the properties of the eikonal equation, its relations with the Aviles-Giga functional and with conservation laws, I will present the main result, stating the equivalence among differentiability properties of the solution, finiteness of certain entropy productions, and the existence of a kinetic formulation. If time permits, I will also present a weaker regularity result based on the div-curl lemma.

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