

Metric entropy for hyperbolic conservation laws

Khai T. Nguyen

NCSU Mathematics Department, USA

Abstract. Inspired by a question posed by Lax in 2002, in recent years it has received an increasing attention the study on the metric entropy for nonlinear PDEs. In this talk, I will present recent results on the sharp estimates on the metric entropy for hyperbolic conservation laws in \mathbf{L}^1 . Estimates of this type could provide a measure of the order of resolution of a numerical method for the corresponding equation.