

Quantitative Compactness Estimates for Conservation Laws

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Some classical compactness results for conservation laws can be strengthened into quantitative estimates.

For instance, one can estimate the ϵ -entropy of the set of entropy solutions of a scalar conservation law with convex flux in space dimension 1 corresponding to a bounded set of initial data.

Likewise, the compensated compactness method can be used to obtain some regularity estimates for entropy solutions of conservation laws.

The talk will discuss some examples of this type of results.