

## **Entropy stability for nonlinear systems of conservation laws**

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Entropy stability plays an important role in the dynamics of non-linear systems of conservation laws. We revisit the general framework of numerical entropy stability for finite-difference/finite-volume approximations of such nonlinear systems. Our approach is based on comparing numerical viscosities with those of entropy conservative schemes. We demonstrate this approach with host of high order entropic schemes. In particular, this paradigm serves as the building block for a class of ENO-based entropic schemes of arbitrarily high-order of accuracy, called TeCNO schemes. Recent evidence shows that entropic solutions need not be unique in more than one-spatial dimension. Instead, entropic measure-valued solutions can be interpreted in an averaged sense, as an ensemble average in configuration space.

Numerical experiments provide a remarkable evidence for the effectiveness of the TeCNO schemes in the computation of such entropy measure valued solutions.