

# Accepted Manuscript

Suitable diffusion for constructing non-oscillatory entropy stable schemes

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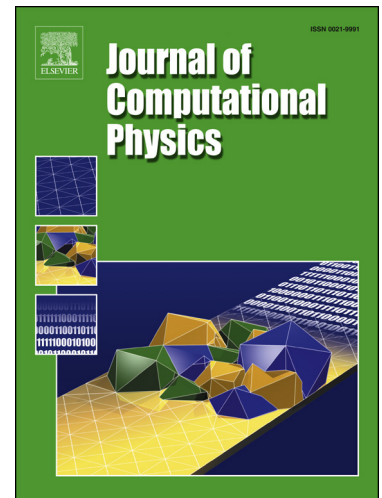
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## Highlights

- Sufficient condition is derived for semi-discrete conservative schemes in entropy variable to be TVD.
- 2. Amount of additive diffusion is explicitly quantified to construct entropy stable TVD fluxes.
- 3. A new generic Entropy Stable TV Stability region is given for the flux limiters in high resolution schemes.
- The smoothness parameter is defined in terms of entropy variable instead of conservative variable.
- The method and analytical results are generic and can be further extended.

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