

Title: A TVD-MUSTA Scheme for Hyperbolic Conservation Laws

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Review by: Mario Forcinito

The author wraps up and extend his previous work in [1] to include also WENO schemes. The algorithm are extended to multidimensional problems, including a two-dimensional example.

References:

1. Y. H. Zahran, *MUSTA-TVD Scheme for Hyperbolic Conservation Laws*, Comptes rendus de l'Académie bulgare des Sciences Tome 59(2006), no. 9, 911-920

See also:

1. V. A. Titarev, E. F. Toro , *MUSTA schemes for multi-dimensional hyperbolic systems: analysis and improvements*, International Journal for Numerical Methods in Fluids, vol. 49, no. 2, pp. 117-147, 2005.
2. E.F. Toro and V.A. Titarev, *MUSTA schemes for systems of conservation laws*, Journal of Computational Physics, vol. 216, no. 2, pp. 403-429, 2006.
3. Y. H. Zahran, *A Central WENO-TVD Scheme for Hyperbolic Conservation Laws*, Novi Sad J. Math., vol. 36, no. 2, pp. 25-42, 2006.
4. Y. H. Zahran, *MUSTA-TVD Scheme for Hyperbolic Conservation Laws*, Comptes rendus de l'Académie bulgare des Sciences Tome 59(2006), no. 9, 911-920
5. My review of reference [1], can be found here
<http://www.surengineering.com/AMS/MR2271919.pdf>