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Flux-corrected dispersion-improved CABARET schemes for linear and nonlinear wave propagation problems

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Highlights

- New dispersion improved CABARET schemes are developed for accurate wave propagation in multiple dimensions
- Nonlinear extensions of the same schemes are proposed for shock-capturing
- The new schemes lead to superior linear wave properties
- Dissipation and dispersion analysis is performed for linear and nonlinear schemes
- Numerical examples for linear advection, nonlinear scalar conservation law, and gas dynamics problems are provided.

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