Significance and Novelty of this Paper

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This paper proves an existing conjecture regarding the eigenvalues of the system arising in the calculation of the Discontinuous Galerkin and Continuous Galerkin predictors in the ADER-WENO method. The result has ramifications for the calculation of the predictors, especially when the ADER-WENO method is being used to solve problems involving conservative, homogeneous hyperbolic systems of partial differential equations.