

Author's novelty file

- Extension of weight-adjusted inner products (closed-form approximation of the inverse of a weighted mass matrix) to matrix-valued weights.
- A new discontinuous Galerkin (DG) method with simplified numerical fluxes for elastic wave propagation in arbitrary heterogeneous media.
- Proofs of energy stability and high order accuracy for the proposed DG method.
- Numerical and computational experiments illustrating the theoretical results and performance of a GPU-accelerated implementation of the proposed method.