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Towards Higher Order Discretization Error Estimation by Error Transport using Unstructured Finite-Volume Methods for Unsteady Problems

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Highlights

- Accurate error estimates are found for unsteady flow by the error transport equation
- Higher order accuracy in error estimates is preserved if used to correct solutions
- Higher order in space and time is possible without discretizing both to higher order
- Co-advancing requires only local solutions in time, unlike unsteady adjoints
- Only one auxiliary equation needs to be solved, agnostic to choice of functionals

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