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Higher-order Unstructured Finite Volume RANS Solution of Turbulent Compressible Flows

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Highlights

- A higher-order finite volume method is developed for RANS simulations on unstructured meshes
- A solution reconstruction strategy on curvilinear coordinates is devised for anisotropic meshes
- The new reconstruction scheme highly improves solution accuracy
- Higher-order discretizations deliver a more accurate solution with fewer degrees of freedom
- Fast and efficient convergence to steady-state is obtained for higher-order methods

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