
13 SPECIAL MOMENTS

A PREPRINT

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ABSTRACT

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Keywords UQ, IPM, SG, Collocation

1 Methods of Uncertainty Quantification

1.1 Collocation

1.2 Stochastic Galerkin

1.3 Intrusive Polynomial Moment Method

2 Method discussion

- kleinere Fehler [11]
- Programmieraufwand [31]
- zweiabhängig
- adaptiv (break up black box approach)
- grobe Auflösung für Momente

3 UQCreator

3.1 Adaptivity

3.2 restart IPM

3.3 one-shot IPM

3.4 adaptive IPM

4 Results

4.1 2D Euler flow over NACA0012

- AoA study
- AoA + Ma number + mehr ?

4.2 2D shallow water dam break

References