Numerical Simulation and Modelling of Unsteady Turbomachinery Flow

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Outline

• General Overview
• Use of Turbomachinery CFD
• Diversity of Turbomachinery CFD
• Key Words of the Lectures
Recent Developments in Numerical Methods for Turbomachinery Flow

**General Overview**

3 Lectures split into 6 parts

1. General Remarks & Scope
2. Numerical Implications of Unsteady Turbomachinery Flow
3. Engineering Turbulence & Transition Modelling
4. Selected Topics of Turbomachinery CFD
5. Some Applications
6. Future Directions

**Framework of Lectures**

- Application-oriented lectures
- Focus is on unsteady turbomachinery flows using structured multiblock meshes
- CFD methodology considered in context with application
- Discuss potential and weakness of models in use from the practical point of view