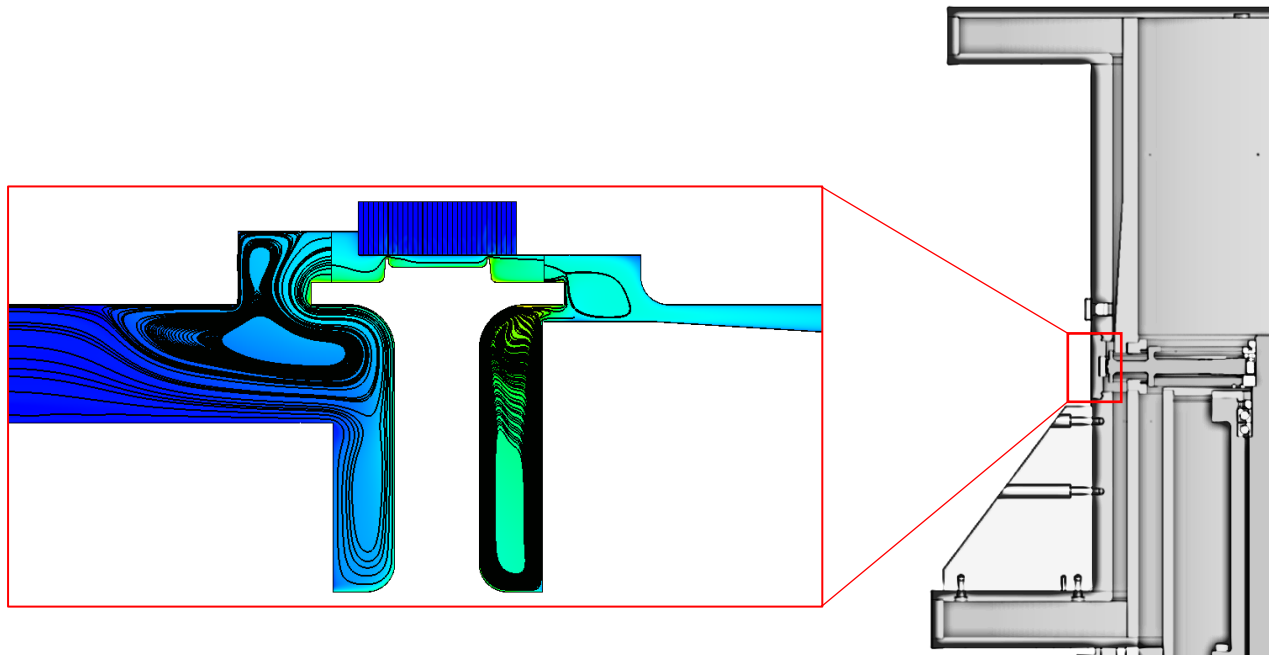*HiWi*

CFD analysis of a labyrinth seal

Background

In low pressure turbines of modern aircraft engines, the rotor stages are provided with a shroud for aerodynamic and structural reasons. The shroud creates a cavity between the rotor and the stationary casing. The innovative design of cavities is a key aspect of increasing efficiency and reducing fuel consumption in modern engines.

TFD operates the rotating labyrinth test rig (RLP) to investigate such cavities. The RLP serves to aero engine companies and shapes the future of the shroud cavity design.

Your task is to work on numerical studies of an innovative and interdisciplinary research project.

Your Profile

- Eager to learn or have knowledge of computational fluid dynamics (CFD) software Ansys CFX
- Enjoy working on numerical studies
- Good command of English

Your tasks

- Familiarisation with the methods
- Pre-processing, execution, and post-processing of the CFD analysis of labyrinth seals in different configurations
- Documentation

Contact

Are you interested?

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