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## Advanced Turbomachinery Simulation using STAR-CCM+



STAR-CCM+ provides a unique set of simulation capabilities, which allow for accurate and rapid simulation of turbomachines. These simulation capabilities include conjugate heat transfer analysis, aeroelastic analysis and performance mapping.

This presentation will discuss modeling capabilities critical for the industry such as geometry handling, conformal meshing of complex bodies, solution methods and advanced post-processing. Details of how the Harmonic Balance Solver within STAR-CCM+ can be used to perform aeroelastic analysis will be presented. Additionally, case studies will be used to illustrate best practices of turbomachinery simulation including meshing and methods for reducing time to solution.

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**Industries:**

**Products:**

**Conference:**

[STAR Global Conference 2013](#)<sup>[2]</sup>

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