

Publikationen (25. März 2024)

2024

- [1] Robin Wickersheim, Manuel Keßler, and Ewald Krämer. Noise prediction of a distributed propulsion system using the actuator line method. *AIAA Journal*, 62(3):1123–1135, 2024.

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- [1] Robin Wickersheim, Manuel Keßler, and Ewald Krämer. Assessment of the actuator line method for the aeroacoustic simulation of distributed electric propulsion. In *AIAA AVIATION Forum*, 2023.
- [2] Robin Wickersheim, Manuel Keßler, and Ewald Krämer. Noise prediction of a distributed propulsion system using the actuator line method. *AIAA Journal*, 62(3):1123–1135, 2024.
- [3] J. Yin, K.-S. Rossignol, L. Rottmann, F. De Gregorio, G. Ceglia, A. Visingardi, M. Barbarino, F. Petrosino, G. Reboul, G. Barakos, G. Qiao, M. Muth, M. Kessler, A. Zanotti, N. Oberti, A. Savino, L. Galimberti, L. Abergo, F. Caccia, L. Vigevano, A. Guardone, G. Bernardini, C. Poggi, C. Testa, and S. Zaghi. Acoustic and aerodynamic evaluation of DLR small-scale rotor configurations within GARTEUR AG26.
- [4] Moritz Muth, Manuel Keßler, and Ewald Krämer. High fidelity aerodynamic and aeroacoustic simulations of multicopter rotors with anhedral during hover and forward flight.
- [5] Robin Wickersheim, Manuel Keßler, and Ewald Krämer. Aeroacoustics of high fidelity urans simulations of distributed electric propellers. *Notes on Numerical Fluid Mechanics and Multidisciplinary Design*, 2023.

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- [1] R. Boisard, L. Lefevre, T. Zhang, G. Barakos, A. Visingardi, F. Löfle, A. Kostek, T. Andronikos, M. Keßler, R. Wickersheim, A. Colli, G. Gibertini, and A. Zanotti. Rotor / rotor aerodynamic interactions - a garteur action group. In *ICAS Congress of the International Council of the Aeronautical Sciences*, 2022.
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- [3] Felix Fechner, Manuel Keßler, Ewald Krämer, and Markus Raffel. Prevention of retreating blade stall by asymmetrically generated lift: Free-flight investigations with a fully autonomous helicopter testbed.

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- [1] Sebastian Miesner, Manuel Keßler, Ewald Krämer, and Ulrich Schäferlein. High-fidelity simulation of the volocopter-2x in cruise flight. In *77th VFS Annual Forum (virtual event)*, 2021.
- [2] Fabian Genuit, Manuel Keßler, and Ewald Krämer. An overset grid (chimera) method for a discontinuous Galerkin discretization of the Navier-Stokes equations. *PAMM*, 20(1):e202000172, 2021.
- [3] Fabian Genuit, Manuel Keßler, and Ewald Krämer. Simulation of flow phenomena at a rotor with a discontinuous galerkin cfd solver. In Wolfgang E. Nagel, Dietmar H. Kröner, and Michael M. Resch, editors, *High Performance Computing in Science and Engineering '19*, pages 395–407, Cham, 2021. Springer International Publishing.
- [4] Fabian Genuit, Manuel Keßler, and Ewald Krämer. A discontinuous galerkin chimera method for unsteady flow problems on moving grids. In Andreas Dillmann, Gerd Heller, Ewald Krämer, and Claus Wagner, editors, *New Results in Numerical and Experimental Fluid Mechanics XIII*, pages 604–614, Cham, 2021. Springer International Publishing.
- [5] Fabian Genuit, Manuel Keßler, and Ewald Krämer. An implicit discontinuous galerkin chimera method for unsteady laminar flow problems with multiple bodies. *PAMM*, 21(1):e202100182, 2021.
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- [1] Christian Stanger, Manuel Keßler, and Ewald Krämer. Design and construction of a rotor-model with aeroacoustic investigation at different flight conditions. In Andreas Dillmann, Gerd Heller, Ewald Krämer, Claus Wagner, Cameron Tropea, and Suad Jakirlic, editors, *New Results in Numerical and Experimental Fluid Mechanics XII*, volume 142 of *Notes on Numerical Fluid Mechanics and Multidisciplinary Design*, pages 759–768. Springer International Publishing, 2020.
- [2] Manuel Keßler, Felix Frey, Johannes Letzgus, C. Öhrle, Jakob Thiemeier, and Ewald Krämer. Progress in IAG’s rotorcraft simulation framework. In Wolfgang E. Nagel, Dietmar H. Kröner, and Michael M. Resch, editors, *High Performance Computing in Science and Engineering '20*. Springer Verlag, 2021.
- [3] Jakob Thiemeier, Constantin Öhrle, Felix Frey, Manuel Keßler, and Ewald Krämer. Aerodynamics and flight mechanics analysis of Airbus Helicopters’ compound helicopter RACER in hover under crosswind conditions. *CEAS Aeronautical Journal*, 11(1):49–66, Jan 2020.

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- [7] Fabian Genuit, Manuel Keßler, and Ewald Krämer. Eine Chimera-Methode für ein Discontinuous-Galerkin Verfahren hoher Ordnung. In *19. STAB-Workshop*, 2019.
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