

Biographical Information: Matthias Ihme



Educational Background

- 2008: Ph.D., Mechanical Engineering, Stanford University, Stanford, CA
- 2002: M.Sc., Computational Engineering, Friedrich-Alexander University, Erlangen, Germany
- 2000: Dipl.-Ing. (FH), Mechanical Engineering, Munich University of Applied Sciences, Germany

Professional and Research Experience

- Since 10/2021 Professor, Mechanical Engineering Department, Stanford University, Stanford, CA
- 08/2018 – 09/2021 Associate Professor, Mechanical Engineering Department, Stanford University, Stanford, CA
- 02/2013 – 07/2017 Assistant Professor, Mechanical Engineering Department, Stanford University, Stanford, CA

Honors and Awards

- Friedrich Wilhelm Bessel Award of Alexander von Humboldt Foundation (2021)
- Research Excellence Award of The Combustion Institute (2020)
- Thermophysics Best Paper “Modeling Heatshield Erosion due to Dust Particle Impacts for Martian Entries” (AIAA 2020-0254)
- JSPS (Japan Society for the Promotion of Science) Fellowships for Research in Japan (2019)
- W. M. Keck Foundation Faculty Scholar, 2017-2021
- Mercator Fellow, 2017-2020
- Bernard Lewis Visiting Lecturer Fellowship, 2017
- Hiroshi Tsuji Early Career Researcher Award, 2017
- Distinguished Paper on Turbulent Flames, 36th International Symposium on Combustion, 2016
- Terman Faculty Fellow Award, 2013 – 2015
- NASA Early Career Faculty Award, 2015
- AFOSR Young Investigator Award, 2010
- ONR Young Investigator Award, 2010
- NSF Career Award, 2009
- Rackham Faculty Research Grant, 2009
- Academic Excellence Award, Munich University of Applied Sciences, 2000
- BMW Scholarship, 1995 – 2002

Research Interests

- Combustion noise and computational modeling of reacting flows
- Development of numerical methods, high-order schemes, and combustion modeling
- X-ray scattering and spectroscopy to study non-equilibrium processes
- Multiphase flows, high-pressure and supercritical flows, combustion and turbulence

Further Information: <http://ihmegroup.stanford.edu>