



Noise propagation simulation in the surrounding of a combustion chamber test stand

Masterthesis /Student project

Within the scope of the construction of a combustion chamber test stand at the Institute of Space Systems (IRAS), the sound propagation in the vicinity of the test stand is to be predicted in order to quantify possible exposures for employees and residents. In one study, the close range of the source will be considered and possible sound conduction / -shielding measures are to be investigated. In another study, larger distances around the noise source are to be investigated in order to predict exposure in the surrounding area. Both projects can be carried out using commercial calculation software available at the Institute of Acoustics and Dynamics. Alternatively, in-house developments based on ISO 9613-2 can also be used.



Quelle: ISBN 978-3-8439-4218-8, Investigation on Heat Transfer and Injector Design Criteria for Methane/Oxygen Rocket Combustion Chambers

Topics

- Sound propagation simulation
- Noise reduction measures
- Immission prognosis

Prior Knowledge

- Fundamentals of Acoustics
- Acoustics-Simulation
- Knowledge in programming (helpful)

Contact (InAD)

Dr.-Ing. Tobias P. Ring
Langer Kamp 19, Room 107
phone: +49 531 / 391 – 8773
t.ring@tu-braunschweig.de

Contact (IRAS)

Tobias Stelzer, M.Sc.
Hermann-Blenk-Str. 23
phone: : +49 531 / 391 - 9977
tobias.stelzer@tu-braunschweig.de