Xinxin Wang , Ph.D. Candidate

wxx@nudt.edu.cn

https://wazedxwxx.github.io/



Education

2021 – · · · · Ph.D. in Aeronautical and Astronautical Science and Technology
National University of Defense Technology, China

2018 – 2020 M.S. in Aeronautical and Astronautical Science and Technology
National University of Defense Technology, China
Thesis title: Applications of Immersed Boundary Method on Detonation Simulation.

B.S. in Flight Vehicle Propulsion Engineering
Northwestern Polytechnical University, China
Thesis title: Design of Experimental Device for High Pressure Combustion Characteristics of Solid Propellant.

Research Publications

Journal Articles

- **Xinxin**, **W.**, Ralf, D., Jianhan, L., Xiaodong, C., & Wandong, Z. (n.d.). A second order ghost-cell immersed boundary method with hybrid reconstruction for compressible simulations. *Computer and Fluids*, (*Revision*).
- Wandong, Z., Jianhan, L., Ralf, D., Xiaodong, C., & **Xinxin**, **W.** (2021). Effect of transverse jet position on flame propagation regime. *Physics of Fluids*, 33(9), 091704. Odoi:https://doi.org/10.1063/5.0063363

Conference Proceedings

- Wandong, Z., Jianhan, L., Xiaodong, C., Ralf, D., & **Xinxin**, **W.** (2022). Effect of mach number on the flame acceleration and deflagration-to-detonation transition. In 28th international colloquium on the dynamics of explosions and reactive systems, Napoli, Italy.
- Can, N., Hongbo, W., Mingbo, S., Yixin, Y., Yanan, W., Li, P., & **Xinxin**, **W.** (2021). Numerical study of shock train characteristics in reverse pressure supersonic pipeline flow. In 5th symposium on coupling flow of internal and external flows of ramjet engines, Weihai, China.
- Wandong, Z., Jianhan, L., Xiaodong, C., & **Xinxin**, **W.** (2021). The influence of the transverse jet in the ddt process on the flame propagation mode. In *The 19th national conference of the computational fluid dynamics*, Nanjing, China.
- Wandong, Z., Jianhan, L., **Xinxin**, **W.**, & Xiaodong, C. (2021). Flame-turbulence interaction in the process of ddt in a fluid-solid combination obstacle. In 7th symposium on heat and mass transfer, Zhangzhou, China.
- **Xinxin**, **W.**, Jianhan, L., Xiaodong, C., & Wandong, Z. (2021). An improved ghost-cell immersed boundary method for detonation simulations. In *21st iacm computational fluids conference (cfc 2021)*, HangZhou, China.

- **Xinxin**, **W.**, Jianhan, L., Xiaodong, C., Wandong, Z., & Liang, L. (2020). Adaptive simulation on multiple wave mode of rotating detonation combustion. In *Research on future warfare and missile weapon system conference*, Taiyuan, China.
- Tiang, L., Wang, H., Xiong, D., Sun, M., Tang, T., Zhao, G., & Xinxin, W. (2019). An adaptive high-resolution and low-dissipation hybrid energy consistent/wenocu scheme. In 4th international conference on computational modeling, simulation and applied mathematics, Guangzhou, China.

Skills

Coding C++, Python, Fortran, Matlab, Shell, LTFX, ...

Web Dev | HTML, CSS.

Misc. Academic research, teaching, training, consultation, LaTeX typesetting and publishing.

Miscellaneous Experience

Awards and Achievements

2016 **Excellent School Students**, Northwestern Polytechnical University.

Third Prize in National Post-Graduate Mathematical Contest in Modeling, Department of Higher Education of the Ministry of Education.

Third Prize in National University Student Social Practice and Science Contest on Energy Saving & Emission Reduce, Department of Higher Education of the Ministry of Education.

Certification

- 2018 College English Test Band 6, Department of Higher Education of the Ministry of Education.
- National Computer Rank Examination Certificate Grade 2. Awarded by National Education Examinations Authority.