List of publications

Article under review or in press in refereed Journals:

Articles in refereed Journals:

[1] I. Ben Hassan Saïdi, S. Wang, G. Fournier, C. Tenaud and J.-C. (2025). *Modal analysis of the triadic interactions in the dynamics of a transitional shock wave boundary layer interaction*. Journal of Fluid Mechanics, **1009**: A43-1—A43-46. https://doi.org/10.1017/jfm.2025.236

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[3] L. Lecointre, R. Vicquelin, S. Kudriakov, E. Studer, and C. Tenaud (2022). *High-order numerical scheme for compressible multi-component real gas flows using an extension of the Roe approximate Riemann solver and specific Monotonicity-Preserving constraints*. Journal of Computational Physics, **450**: 110821. https://doi.org/10.1016/j.jcp.2021.110821

[4] Z. Zou, N. Grenier, S. Kokh, C. Tenaud, and E. Audit (2022). *Compressible solver for two-phase flows with sharp interface and capillary effects preserving accuracy in the low Mach regime.* Journal of Computational Physics, **448**: 110735. https://doi.org/10.1016/j.jcp.2021.110735

[5] A. Picard, N. Lelong, O. Jamon, V. Fauvher, and C. Tenaud (2021). *A Finite-Volume Chimera method for Fast Transient Dynamic problems with complex flows*. International Journal of Computational Fluid Dynamics, **35**(10): 799—825. https://doi.org/10.1080/10618562.2021.2009468

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[8] I. Ben Hassan Saïdi, G. Fournier & C. Tenaud (2020), *On the behavior of high order one-step monotonicity-preserving scheme for direct numerical simulation of turbulent flows.* International Journal of Computational Fluid Dynamics, **34**(9): 671—704. https://doi.org/10.1080/10618562.2020.1819535

[9] M. Garcia-Gasulla, F. Banchelli, K. Peiro, G. Ramirez-Gargallo, G. Houzeaux, I. Ben Hassan Saïdi, C. Tenaud, I. Spisso, & F. Mantovani (2020). *A generic performance analysis technique applied to different CFD methods for HPC.*

International Journal of Computational Fluid Dynamics, **34**(7-8): 508—528. https://doi.org/10.1080/10618562.2020.1778168

[10] Z. Zou, E. Audit, N. Grenier & C. Tenaud (2020). *An Accurate Sharp Interface Method for Two-Phase Compressible Flows at Low-Mach Regime.* Flow Turbulence and Combustion, **105**: 1413—1444. https://doi.org/10.1007/s10494-020-00125-1

[11] E. Saikali, G. Bernard-Michel, A. Sergent, C. Tenaud and R. Salem (2019). *Highly resolved large eddy simulations of a binary mixture flow in a cavity with two vents: influence of the computational domain*. International Journal of Hydrogen Energy, International Journal of Hydrogen Energy, **44**(17): 8856—8873. https://doi.org/10.1016/j.ijhydene.2018.08.108

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[1] Fournier, G. ; Chpoun, A. ; Fraigneau, Y. and Tenaud, C., *Direct Numerical Simulations of the Shock-Induced Separation of a Laminar Boundary Layer*. DIRECT AND LARGE-EDDY SIMULATION X Book Series: ERCOFTAC Series Volume: **24** Pages: 327—332 (2018).

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Lecture notes:

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