

Date of birth: 08/03/1996
Nationality: French

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| RESEARCH INTERESTS | Turbulence, Statistical Physics, Computational Physics, Geophysical flows, Laminar to Turbulent transition, Wave Turbulence, Perturbative Methods | |
| CURRENT POSITION | Post-doctoral researcher at the Technion - Israel Institute of Technology , (Dept. of Physics), in collaboration with Anna Frishman. | 01/2023 – now |
| EDUCATION | Sorbonne Université , Paris (France) | 2019–2022 |
| | – Ph.D. at the Laboratory of Physics and Mechanics of Heterogeneous Media (ESPCI Paris) : “Transition to turbulence in shear flows”, supervised by Profs. Laurette S. Tuckerman & Dwight Barkley. | |
| | ISAE-Supaero , Toulouse (France). | 2018–2019 |
| | – M.Sc in Aerospace Engineering: Aerodynamics, simulations and modeling. | |
| | – M.Sc in Fluid Dynamics, Energy and Transfers (Université Paul Sabatier) | |
| | Ecole polytechnique , Palaiseau (France). | 2015–2019 |
| | – <i>Diplôme d'Ingénieur</i> (M.Sc.) in Mechanical Engineering. | |
| | Preparatory class , Lycée Saint-Louis, Paris (France). | 2013–2015 |
| | – B.Sc.: Physics, Mathematics, Chemistry. | |
| AWARDS | – Euromech Young Scientist Prize 2025 , received at the 2 nd European Fluid Dynamics. | |
| | – Runner-up in the JFM Emerging Scholar Best Paper Prize 2024 for paper n°5. | |
| PUBLICATIONS | – S. Gomé & A. Frishman. “Helicity controls the direction of fluxes in rotating turbulence”, 2025. <i>ArXiv preprint</i> https://arxiv.org/pdf/2512.05253 . | |
| | – S. Gomé & A. Frishman. “Waves drive the rise and fall of 2D flows in rotating turbulence”, 2025. <i>ArXiv preprint</i> , https://arxiv.org/abs/2509.18323 . | |
| | – S. Gomé, A. Rivière, L. S. Tuckerman. “Phase Transition to Turbulence via Moving Fronts”. <i>Physical Review Letters</i> , 2024. | |
| | – S. Gomé, L. S. Tuckerman, D. Barkley. “Wavelength selection in transitional shear turbulence. Part 1. Spectral analysis”. <i>Journal of Fluid Mechanics</i> , 2023 | |
| | – S. Gomé, L. S. Tuckerman, D. Barkley. “Wavelength selection in transitional shear turbulence Part 2: Emergence and optimal wavelength”. <i>Journal of Fluid Mechanics</i> , 2023. | |
| | – S. Gomé, L. S. Tuckerman, D. Barkley. “Extreme events in transitional turbulence”. <i>Philosophical Transactions of the Royal Society</i> , 2022. | |
| | – S. Gomé, L. S. Tuckerman, D. Barkley. “Statistical transition to turbulence in plane channel flow”. <i>Physical Review Fluids</i> , 2020. | |
| TEACHING | Teaching Assistant at Sorbonne Université (Dept. of Mechanics): | |
| | – <i>Mathematical and numerical methods for Mechanics</i> , for 2 nd and 3 rd year Undergraduates; | |
| | – <i>Fluid Mechanics</i> (including the supervision of experimental projects) for 2 nd and 3 rd year Undergraduates. | |
| SCHOOLS | – CIRM 2025 (Marseille): “Physics and Mathematics of Hydrodynamic and Wave turbulence” | |
| | – Les Houches 2023, “200 years of Navier-Stokes and turbulences” | |
| | – Boulder 2022, “Hydrodynamics across scales” | |