

## Complete List of Publications – Helena J. Nussenzveig Lopes

1. with James P. Kelliher, Christophe Lacave, Milton C. Lopes Filho and Edriss Titi. Large time behavior for the 3D Navier-Stokes with Navier boundary conditions. Accepted for publication in *Journal of Mathematical Fluid Mechanics*, 2025.
2. with Fabian Jin, Samuel Lanthaler and Milton C. Lopes Filho. Sharp conditions for energy balance in two-dimensional incompressible ideal flow with external force. *Nonlinearity*, 38 (2025), 075007.  
<https://iopscience.iop.org/article/10.1088/1361-6544/add4b6>
3. with David Ambrose and Milton C. Lopes Filho. Improved regularity and analyticity of Cannone-Karch solutions of the three-dimensional Navier-Stokes equations on the torus. *Monatsh. Math.* 206 (2025), 781–795.
4. with David Ambrose and Milton C. Lopes Filho. Existence and analyticity of solutions of the Kuramoto-Sivashinsky equation with singular data. *Proc. Royal Soc. Edinburgh. Section A, Mathematics*, Published online <https://doi.org/10.1017/prm.2024.106> (2025).
5. with David Ambrose and Milton C. Lopes Filho. Existence and analyticity of the Lei-Lin solution of the Navier-Stokes equations on the torus. *Proc. Amer. Math. Soc.*, 152 (2023), 781–795.
6. with A. Valentina Busuioc, Dragos Iftimie and Milton C. Lopes Filho. The incompressible  $\alpha$ -Euler equations in the exterior of a vanishing disk, *Indiana Univ. Math. J.*, 73 (2024), 691–721.
7. with Milton C. Lopes Filho. Energy balance for forced two-dimensional incompressible ideal fluid flow. *Phil. Trans. R. Soc. A*, 380 (2022), 20210095.  
<https://doi.org/10.1098/rsta.2021.0095> (2022).
8. with Christian Seis and Emil Wiedemann. On the vanishing viscosity limit for 2D incompressible flows with unbounded vorticity. *Nonlinearity*, 34 (2021), 3112–3121.
9. with A. Valentina Busuioc, Dragos Iftimie and Milton C. Lopes Filho. The limit  $\alpha \rightarrow 0$  of the  $\alpha$ -Euler equations in the half-plane with no-slip boundary conditions and vortex sheet initial data. *SIAM J Math Analysis*. 52 (2020), 5257–5286.
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11. with Peter Constantin, Milton C. Lopes Filho and Vlad Vicol. Vorticity measures and vanishing viscosity. *Archive Rat Mech Anal*. 234 (2019), 575–593.
12. with Gung-Min Gie, J.P. Kelliher, M.C. Lopes Filho and A.L. Mazzucato. The vanishing viscosity limit for some symmetric flows. *Ann. Instit. Henri Poincaré C, Analyse non linéaire*. 36 (2019), 1237–1280.
13. with David Ambrose and Milton C. Lopes Filho. Confinement of vorticity for the 2D Euler-alpha equations. *Journal of Differential Equations*, 265 (2018), 5472–5489.
14. with Christophe Lacave and Milton C. Lopes Filho. Asymptotic behavior of incompressible ideal flow around small disks. *Asymptotic Analysis*, v. 108, no. 1-2, (2018), 45–83.
15. with Quansen Jiu, Dongjuan Niu and Milton C. Lopes Filho. The limit of vanishing viscosity for the incompressible 3D Navier-Stokes equations with helical symmetry. *Physica D: Nonlinear Phenomena*, 376, (2018) 238–246. Special Issue in Honor of Edriss S. Titi's 60th Birthday.
16. with Alexey Cheskidov, Milton C. Lopes Filho and Roman Shvydkoy. Energy conservation in two-dimensional incompressible ideal fluids. *Communications in Mathematical Physics*, 348(1), (2016) 129–143.

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18. with D. A. F. Albanese and E. S. Titi. Continuous data assimilation for the three-dimensional Navier-Stokes- $\alpha$  model. *Asymptotic Analysis*, 97 (2016), 139–164.
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