

Publications of Patrick E. Farrell

Articles in review

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- [57] **P. E. Farrell** and P. A. Gazca-Orozco (2020). *An augmented Lagrangian preconditioner for implicitly-constituted non-Newtonian incompressible flow*. [arXiv:2005.03150](#)
- [56] N. Boullé, E. G. Charalampidis, **P. E. Farrell**, and P. G. Kevrekidis (2020). *Deflation-based Identification of Nonlinear Excitations of the 3D Gross–Pitaevskii equation*. [arXiv:2004.10446](#)
- [55] **P. E. Farrell**, L. Mitchell, L. R. Scott, and F. Wechsung (2020a). *A Reynolds-robust preconditioner for the Reynolds-robust Scott–Vogelius discretization of the stationary incompressible Navier–Stokes equations*. [arXiv:2004.09398](#)
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- [50] M. Croci, M. B. Giles, and **P. E. Farrell** (2019). *Multilevel quasi Monte Carlo methods for elliptic PDEs with random field coefficients via fast white noise sampling*. [arXiv:1911.12099](#)

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- [49] J. G. Williams, A. A. Castrejon-Pita, B. W. Turney, **P. E. Farrell**, S. J. Tavener, D. E. Moulton, and S. L. Waters (2020). “Cavity flow characteristics and applications to kidney stone removal”. In: *Journal of Fluid Mechanics*
- [48] H. A. Alawiye, **P. E. Farrell**, and A. Goriely (2020). “Revisiting the wrinkling of elastic bilayers II: post-bifurcation analysis”. In: *Journal of the Mechanics and Physics of Solids*. [arXiv:2002.02051](#)
- [47] **P. E. Farrell**, Y. He, and S. P. MacLachlan (2019). “A local Fourier analysis of additive Vanka relaxation for the Stokes equations”. In: *Numerical Linear Algebra with Applications*. [arXiv:1908.09949](#). DOI: [10.1002/nla.2306](#)
- [46] M. Croci and **P. E. Farrell** (2020). “Complexity bounds on supermesh construction for quasi-uniform meshes.” In: *Journal of Computational Physics*. [arXiv:1911.11589](#). DOI: [10.1016/j.jcp.2020.109459](#)

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