

# Francesco Lin - Publication list

Updated 01/26

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## Research papers

*On integral rigidity in Seiberg-Witten theory.*

with Mike Miller Eismeier, Forum Math. Sigma 13 (2025), Paper No. e184.

*Divergence-free framings of three-manifolds via eigenspinors.*

Doc. Math. 31 (2026), no. 2, 445-451.

*A remark on taut foliations and Floer homology.*

Math. Res. Lett. 31 (2025), no. 6, 1819-1825.

*Homology cobordism and the geometry of hyperbolic three-manifolds.*

Advances in Mathematics 462 (2025), Paper No. 110087.

*Monopole Floer homology and invariant theta characteristics.*

Journal of the London Mathematical Society (2) 109 (2024), no. 5, Paper No. e12895, 27 pp.

*Monopoles, twisted integral cohomology, and Hirsch algebra.*

with Mike Miller Eismeier, Geometry & Topology, 28 (2024), no. 8, 36973778.

*Closed geodesics and Frøyshov invariants of hyperbolic three-manifolds.*

with Michael Lipnowski, J. Eur. Math. Soc. (JEMS) 27 (2025), no. 10, 4201-4281.

*Monopole Floer homology, eigenvalue multiplicities and the Seifert-Weber dodecahedral space.*

with Michael Lipnowski, Int. Math. Res. Not. IMRN 2022, no. 9, 6540-6560.

*Indefinite Stein fillings and  $Pin(2)$ -monopole Floer homology.*

Selecta Mathematica (N.S.) 26 (2020), no. 2.

*Monopole Floer homology and SOLV geometry.*

Annales Henri Lebesgue, Volume 3 (2020), pp. 1117-1131.

*Hyperbolic four-manifolds with vanishing Seiberg-Witten invariants.*

with Ian Agol, Characters in low-dimensional topology, 1-8, Contemp. Math., 760 (2020).

*The Seiberg-Witten equations and the length spectrum of hyperbolic three-manifolds.*

with Michael Lipnowski, J. Amer. Math. Soc. 35 (2021), no. 1, 233-293.

*Non-formality in  $Pin(2)$ -monopole Floer homology.*

Quantum Topology 12 (2021), no. 2, 309-371.

*$Pin(2)$ -monopole Floer homology and the Rokhlin invariant.*

Compositio Mathematica 154 (2018), no. 12, 2681-2700.

*Monopole Floer homology and the spectral geometry of three-manifolds.*

Communications in Analysis and Geometry, Vol. 28, No. 5 (2020), pp. 1211-1219.

*Bar-Natan's deformation of Khovanov homology and involutive monopole Floer homology.*

Mathematische Annalen 373 (2019) no. 1-2, 489-516.

*$Pin(2)$ -monopole Floer homology, higher compositions and connected sums.*

Journal of Topology 10 (2017), no. 4, 921-969.

*The surgery exact triangle in  $Pin(2)$ -monopole Floer homology.*

Algebraic & Geometric Topology 17-5 (2017), 2915-2960.

*Exact Lagrangian caps of Legendrian knots.*

Journal of Symplectic Geometry, Vol. 14, No. 1 (2016), pp. 269-295.

**Research  
monographs**

*A Morse-Bott approach to monopole Floer homology and the Triangulation conjecture.*  
Memoirs of the AMS, 255 (2018), no. 1221.

**Expository  
writings**

*Lectures on families of Dirac operators and applications.*  
Proceedings of Symposia in Pure Mathematics 109 (2024), p. 1-16.

*Lecture notes on monopole Floer homology.*  
Proceedings of the 22nd Gokova Geometry/Topology conference (2016), pp. 39-80.