

**Articles in books  
and conference proceedings**

**2016**

46. N.G. Parker, A.J. Allen, C.F. Barenghi and N.P. Proukakis, A quantum storm in a teacup, in *Universal Themes of Bose-Einstein Condensation*, Cambridge University Press (2016), edited by David Snoke, Nikolaos Proukakis and Peter Littlewood.

**2015**

45. G.W. Stagg, A.J. Allen, C.F. Barenghi, and N.G. Parker, Classical-like wakes past elliptical obstacles in atomic Bose–Einstein condensates, *J. Phys. Conf. Series* **594**, 012044 (2015)

**2014**

44. E. Varga, C.F. Barenghi, Y.A. Sergeev and L. Skrbek, Two-dimensional simulation of vortex point and tracer particles in counterflowing He-II, *EPJ Web of Conferences* **67**, 02124 (2014).
43. A. White, N. Proukakis, C. Barenghi Isaac Newton Institute TOD conference proceedings *Knotted, Linked and Tangled Flux in Quantum and Classical Systems* edited by K. Bajer, (arXiv:1303.0640)

**2013**

42. F. Maggioni, S.Z. Alamri, C.F. Barenghi and R.L. Ricca, Vortex knots dynamics in Euler fluids, in *IUTAM Symposium on Topological Fluid Dynamics: Theory and Applications*, ed. by H.K. Moffatt, K. Bajer and Y. Kimura, *Procedia IUTAM*, vol. 7, pp. 29–38 (2013).
41. A.J. Allen, C.F. Barenghi, N.P. Proukakis, and E. Zaremba, A Dynamical Self-Consistent Finite Temperature Kinetic Theory: The ZNG Scheme, to appear in *Quantum Gases: Finite Temperature and Non-Equilibrium Dynamics* (Vol. 1 Cold Atoms Series). N.P. Proukakis, S.A. Gardiner, M.J. Davis and M.H. Szymanska, eds. Imperial College Press, London (in press)

**2011**

40. A.W. Baggaley and C.F. Barenghi, Turbulent cascade of Kelvin waves on vortex filaments, *J. Phys. Conf. Ser.* **318**, 062001 (2011)
39. D.H. Wacks and C.F. Barenghi, Shell Models of Superfluid Turbulence, *J. Phys. Conf. Ser.* **318**, 092033 (2011).

38. A.C. White, N.P. Proukakis, A.J. Youd, A.W. Baggaley and C.F. Barenghi, Turbulence in a Bose-Einstein condensate, *J. Phys. Conf. Ser.* **318**, 062003 (2011).

**2010**

37. C.F. Barenghi, Laminar, turbulent, or doubly turbulent? *Physics* **3**, 60 (2010).

**2009**

36. S. Alamri, A.J. Youd, and C.F. Barenghi, Reconnection of vortex bundles, in *Advances in Turbulence XII*, ed. by B. Eckhardt, Springer (2009)
35. Y.A. Sergeev, C.F. Barenghi, and N. Suramlshvili, Visualization of quantum turbulence in  $^3\text{He-B}$  by thermal excitations in *Advances in Turbulence XII*, ed. by B. Eckhardt, Springer (2009)
34. E. Leveque, C.F. Barenghi and P.-E. Roche, Turbulent cascade of quantum fluid at finite temperature in *Advances in Turbulence XII*, ed. by B. Eckhardt, Springer (2009)
33. S.W. Van Sciver and C.F. Barenghi, Visualisation of quantum turbulence, *Progress of Low Temperature Physics: Quantum Turbulence*. Vol. 16, ed. by W.P. Halperin and M. Tsubota (2009) (invited).

**2007**

32. C.F. Barenghi, Knots and unknots in superfluid turbulence, *Milan Journal of Mathematics*, **75** 177–196 (2007).
31. Y.A. Sergeev, C.F. Barenghi and D. Kivotides, Tracer particles in turbulent superfluid helium, in *Advances In Turbulence XI*, ed. by J.M.L.M. Palma, A. Silva Lopes, page 11–13, Springer, 2007.
30. A.J. Mee, D. Kivotides, C.F. Barenghi and Y.A. Sergeev, Trajectories of solid particles in a tangle of vortex filaments, in *Advances In Turbulence XI*, ed. by J.M.L.M. Palma, A. Silva Lopes, page 55–57, Springer, 2007.

**2005**

29. C.F. Barenghi, Suprafluidität (in German), in *Effekte der Physik und ihre Anwendung*, ed. by Manfred von Ardenne, Gerhard Musiol and Siegfried Reball, Verlag Harri Deutsch (2005) (invited).

**2004**

28. C.F. Barenghi, Turbulent transitions for fluids, *Physics World* **17**, 17–18 (2004), invited.

27. C.F. Barenghi, M. Tsubota, T. Araki and A. Mitani, Vortex instability in rotating superfluid turbulence, in *Advances In Turbulence IX*, (2004).
26. by A.J. Youd, C.F. Barenghi and A.P. Willis, Hydromagnetic instabilities in Taylor-Couette flow at finite and infinite aspect ratio, in *MHD Couette Flows* ed. by R. Rosner, G. Ruediger and A. Bonanno, AIP Conference Proceedings **733**, 2004, page 83.
25. L. Gareze, Y. Tadmor, C.F. Barenghi and J.M. Harris, Tangled eye movements: a new method to quantify human scan paths, *Perception* **33** 133–133 Suppl. S (2004).
24. C.F. Barenghi, Turbulent transitions for fluids, *Physics World* **17**, 17–18 (2004) (invited).
23. C.F. Barenghi, M. Tsubota, T. Araki and A. Mitani, Vortex instability in rotating superfluid turbulence, in *Advances In Turbulence IX*, (2004).

### 2003

22. C.F. Barenghi, Waves and turbulence stir superfluids, *Physics World*, **16** 20 (2003), (invited).
21. C.F. Barenghi, Superfluid turbulence: numerical simulations of vortex reconnections, in *Reynolds Number Scaling In Turbulent Flow* ed. by A.J. Smits and K.R. Sreenivasan, Kluwer (2003), (invited).

### 2002

20. C.F. Barenghi, D. Kivotides, J.C. Vassilicos and D.C. Samuels, Energy and pressure spectra in superfluid turbulence, in *Advances In Turbulence IX*, ed. by I.P. Castro, P.E. Hancock and T.G. Thomas, CIMNE (2002).
19. D.R. Poole, C.F. Barenghi and D.C. Samuels, The degree of tangleness of knotted vortex filaments, in *Advances In Turbulence IX* ed. by I.P. Castro, P.E. Hancock and T.G. Thomas, CIMNE (2002).
18. C.F. Barenghi, R.L. Ricca and D.C. Samuels, Complexity measures of tangled vortex filaments, *Proceedings of the IUTAM Symposium of Tubes, Sheets And Singularities In Fluid Dynamics* (2002).

### 2001

17. C.F. Barenghi, Turbulence in superfluids, in *Turbulence: Structure and Modulation*, Springer's CISM, Courses and Lectures **415** (2001), ed. by A. Soldati and R. Monti, pp.77–92 (invited).
16. C.F. Barenghi, Quantized Vortex Dynamics, in *Introduction to superfluid vortices and turbulence, And Superfluid Turbulence*, pp. 3–13, Springer's Lecture Notes in Physics (2001), ed. by C.F. Barenghi, R.J. Donnelly and W.F. Vinen

15. D. Kivotides, O.C. Idowu, C.F. Barenghi and D.C. Samuels, Numerical methods for coupled normal fluid and superfluid motion in He II, in *Quantized Vortex Dynamics And Superfluid Turbulence*, Springer's Lecture Notes in Physics (2001), pp.162–176, ed. by C.F. Barenghi, R.J. Donnelly and W.F. Vinen.
14. S.P. Godfrey, D.C. Samuels and C.F. Barenghi, Vortices and stability in superfluid boundary layers, in *Quantized Vortex Dynamics And Superfluid Turbulence*, Springer's Lecture Notes in Physics (2001), pp. 184–190, ed. by C.F. Barenghi, R.J. Donnelly and W.F. Vinen.

**2000**

13. D. Kivotides, C.F. Barenghi and D.C. Samuels, Turbulence in liquid helium, *Advances In Turbulence VIII*, ed. by C. Dopazo, pp. 929–932, CISME, Barcelona (2000).
12. C.F. Barenghi in *Physics Of Rotating Fluids*, ed. by C. Egbers and Superfluid Couette flow, G. Pfister, Springer's series on Lecture Notes in Physics (2000), (invited).
11. C.F. Barenghi, p. 104, in *Turbulence Structures And Vortex lines and vortex tangles in superfluid helium*, *Vortex Dynamics* edited by J.C. Vassilicos and J.C.R. Hunt, Cambridge University Press (2000) (invited).

**1998**

10. R.L. Ricca, D.C. Samuels and C.F. Barenghi, Vortex knots, in *Advances In Turbulence VII* edit by U. Frisch, Kluwer Academic Publishers, 369 (1998).
9. C.F. Barenghi, D.C. Samuels, G.H. Bauer and R. J. Donnelly, Vortex structures in turbulent superfluid flow, in *Advances In Turbulence VII* edit by U. Frisch, Kluwer Academic Publishers, 331 (1998).
8. D.J. Melotte and C.F. Barenghi, Turbulence in pipe flow of helium II, in *Advances In Turbulence VII* edit by U. Frisch, Kluwer Academic Publishers, 89 (1998).

**1997**

7. M.R. Walker and C.F. Barenghi, Acta Astron. et Geophys. Univ. On a numerical solution to the magnetoconvection problem, *Comenianae* **XIX**, 293 (1997).
6. C.F. Barenghi, G.G. Bauer, D.C. Samuels and R.J. Donnelly, A numerical investigation of vortex coupled superfluidity, *Czech. Journal of Physics* **46**, 29 (1996)

5. K.L. Henderson and C.F. Barenghi, Nonlinear Taylor flow of helium II, *Czech. Journal of Physics* **46**, 75 (1996)

**1994**

4. C.F. Barenghi, Quantized vortices between rotating cylinders, Bericht 2 / 1994, Max Plank Institut fur Stromungsforschung, 77-78 (1994).

**1992**

3. C.F. Barenghi, Nonlinear dynamos in a spherical shell, in *Theory Of Solar And Planetary Dynamos* ed. by M.R.E. Proctor and A. Gilbert, Cambridge 1993.

**1990**

2. C.F. Barenghi, A spectral method for time modulated Taylor Couette flow, *Computer Methods Applied Mechanics and Engineering* **80**, 223-227 (1990).

**1983**

1. C.F. Barenghi, C.E. Swanson and R.J. Donnelly, Axial homogeneity, anisotropy and drift of a tangle of quantized vortices in HeII, in *75th Jubilee Conference on Helium4*, ed. by J.G.M. Armitage, World Scientific Publishing Co. 52-53 (1983).