

Curriculum Vitae – Résumé

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Education

Ph.D. (Mathematics) (16.07.1994). U. Cambridge (Trinity College). Title: *Geometric and topological aspects of vortex filament motion*. Supervisor: Professor H.K. Moffatt.

Professional Career (selected)

2016-to date, (from 2023 Distinguished) Guest Professor, Beijing U. Technology
1992-1997, 1998-2003 Research Fellow and Lecturer, University College London
1993-1995 Research Associate, Politecnico di Torino

Awards and Distinctions (selected)

2023-to date, SKCM2 World Premier Institute Affiliate Member, Hiroshima U., Japan
2003-2007 *Return Scholar*, Italian Ministry of Education, Italy

Direction and Organisation of International Programs (selected)

2011 Principal Organiser and Scientific Director, 4-month program on *Knots and Applications*.
Mathematics Research Centre “E. De Giorgi”, Scuola Normale Superiore, Pisa
2000 Principal Organiser, 4-month program *Geometry and Topology of Fluid Flows*. Isaac
Newton Institute for Mathematical Sciences, Cambridge

Highest impact publications (selected)

Moffatt, H.K. & Ricca, R.L. (1992) Helicity and the Călugăreanu invariant. *Proc. R. Soc. A* **439**, 411-429.
Ricca, R.L. (1994) The effect of torsion on the motion of a helical vortex filament. *J. Fluid Mech.* **273**, 241-259.
Ricca, R.L. (2005) Inflexional disequilibrium of magnetic flux tubes. *Fluid Dyn. Res.* **36**, 319-332.
Goldstein, R.E., Moffatt, H.K., Pesci, A.I. & Ricca, R.L. (2010) A soap film Möbius strip changes topology with a twist singularity. *PNAS USA* **107**, 21979-21984.
Ricca, R.L. & Nipoti, B. (2011) Gauss’ linking number revisited. *J. Knot Theory & Its Ram.*, **20**, 1325-1343.

Edited Volumes (selected)

Ricca, R.L. & Liu, X. (exp. May 2024) *Knotted Fields*. Lecture Notes in Mathematics **2344**. Springer-Verlag. Heidelberg, Germany. In press.
Ricca, R.L. (2009) *Lectures on Topological Fluid Mechanics*. Springer-CIME Lecture Notes in Mathematics **1973**. Springer-Verlag. Heidelberg, Germany.
Ricca, R.L. (2001) *An Introduction to the Geometry and Topology of Fluid Flows*. NATO ASI Series II, **47**. Kluwer. Dordrecht, The Netherlands.
Ricca, R.L. & Liu, X. (exp. June 2024) *Knotted Fields*. Lecture Notes in Mathematics **2344**. Springer-Verlag. Heidelberg, Germany. In press. ISBN: 978-3-031-57984-4

Bibliometric Data and Impact

- Google Scholar: h-index = 25; i10-index = 45; 2706 citations
- SCOPUS (65 items): h-index: 19, 1190 citations
- ISI-Web of Science (67 items): h-index = 19; sum of times cited: 1441