

# Curriculum Vitae – Résumé

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Date of birth: 24 January, 1960. Place of birth: Casale Monferrato (AL), Italy.  
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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)

2016-2020, 2022-2024 BJUT Guest Professor, Beijing University of Technology.  
1992-1997, 1998-2003 Research Fellow and Lecturer, University College London.  
1993-1995 Research Associate, Politecnico di Torino.

## Awards and Distinctions (selected)

2003-2007 “*Brain Gain*” *Programme Scholarship* (“Incentivazione alla mobilità di studiosi stranieri e italiani residenti all'estero”), Italian Ministry of Education, Italy.  
2001 *JSPS Invitation Fellowship*, Japan Society for the Promotion of Science, Japan.  
1991 *J.T. Knight Prize* (Mathematics). University of Cambridge, UK.

## Direction and Organization of International Programmes (selected)

2011 Principal Organiser and Scientific Director, 4-month programme *Knots and Applications*. Mathematics Research Centre “E. De Giorgi”, Scuola Normale Superiore, Pisa.  
2000 Principal Organiser, 4-month programme *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.  
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.  
Liu, X. & Ricca, R.L. (2012) The Jones polynomial for fluid knots from helicity. *J. Phys. A: Math. & Theor.*, **45**, 205501.

## Edited Volumes

Ricca, R.L. (Editor) (2009) *Lectures on Topological Fluid Mechanics*. Springer-CIME Lecture Notes in Mathematics **1973**. Springer-Verlag. Heidelberg, Germany.  
Ricca, R.L. (Editor) (2001) *An Introduction to the Geometry and Topology of Fluid Flows*. NATO ASI Series II, **47**. Kluwer. Dordrecht, The Netherlands.

## Bibliometric Data and Impact

- Google Scholar: h-index = 24; i10-index = 40; 2467 citations
- SCOPUS (63 items): 1075 citations; h-index: 19
- ISI-Web of Science (61 items): h-index = 19; sum of times cited: 1323