## Curriculum Vitae for Alberto Cattaneo

October 9, 2023

### Education

- *Laurea cum laude* (110/110) in Physics from *Università degli Studi di Milano*, March 22, 1991
- *Ph.D.* (evaluation: excellent) in Theoretical Physics from *Università degli Studi di Milano*, November 16, 1995, Advisor: M. Martellini

### Appointments

- 06/2003 - present *Full professor*, Institute of Mathematics, University of Zurich
- 08/2015 - 07/2017 *Director*, Institute of Mathematics, University of Zurich
- 08/2013 - 07/2015 *Deputy Director*, Institute of Mathematics, University of Zurich
- 09/1998 - 05/2003 *Assistant Professor*, Institute of Mathematics, University of Zurich
- 09/1997 - 08/1998 *Postdoc*, Mathematics Department, Università degli Studi di Milano (Prof. Cotta-Ramusino)
- 09/1995 - 08/1997 *Postdoc*, Physics Department, Harvard University (Prof A. Jaffe)

### Honors and Awards

- ICM invited speaker, Madrid 2006
- Fellow of the American Mathematical Society

### Grants

2001 - 2024 **14 grants** from the Swiss National Science Foundation (SNSF)
Total funding: CHF 14'022'078.

### Networks - selection

- 10/2022 - 10/2026 COST Action 21109Cartan geometry, Lie, Integrable Systems, Quantum Group Theories for Applications (CaLISTA)
- 07/2014 - 06/ 2026 National Centre of Competence in Research (NCCR): The Mathematics of Physics, *SwissMAP*, Phase I, II and III.
- 09/2021 - 08/2025 Simons Collaboration on Global Categorical Symmetries (SCGCS)
- 04/2015 - 04/2019 COST Action MP1405, Quantum structure of spacetime (QSPACE)
- 01/2005 - 12/2009 ENIGMA: European Network in Geometry, Mathematical Physics and Applications.

### Memberships - selection

- 09/2022 - 08/2023 Associate fellow of the Collegium Helveticum
- 01/2023 - 12/2025
  03/2017 - 12/2022 Member of the international Scientific Advisory Board, MPIM Bonn
- 01/2020 - 12/2023 Member of the extended expert pool WT 1 (Fellowship panel on Mathematics) of the Research Foundation Flanders (FWO)
- 01/2008 - 12/2016 Member of the jury of the "André Lichnerowicz Prize in Poisson Geometry"

### Editorships

- Reviews in Mathematical Physics
- Tbilisi Mathematical Journal

**Publications**

**Summary:** 101 Peer reviewed publications, 1 Lecture Notes, 1 Book (Chapter Author), 3 Books (Editor), 7 Preprints.
**Metrics:** Citations: 4462, h-index 32 (All-time, Google Scholar, 08/10/2023)
**Top publications**:

- *On the Poisson Sigma Model, Symplectic Groupoids, and Deformation Quantization*
  - A.S. Cattaneo, G. Felder, *A Path Integral Approach to the Kontsevich Quantization Formula*. Communications in Mathematical Physics 212, (2000) 591-611. **684 citations**
  - A.S. Cattaneo, G. Felder, *Poisson sigma models and symplectic groupoids*. Quantization of singular symplectic quotients (2001) 61-93. **239 citations**
  - A.S. Cattaneo, G. Felder, *Relative formality theorem and quantisation of coisotropic submanifolds*, Advances in Mathematics 208 (2) (2007), 521-548. **184 citations**
  - A. S. Cattaneo, G. Felder, L. Tomassini (2002). *From Local to Global Deformation Quantization of Poisson Manifolds*, Duke Math. J. 115(2): 329-352, 2002 **176 citations**
- *On Integral Invariants of Knots and Links*
  - A. S. Cattaneo, P. Cotta-Ramusino, R. Longoni, *Configuration spaces and Vassiliev classes in any dimension*. Algebraic & Geometric Topology, 2(2) (2002), 9491000. **109 citations**
  - R. Bott, A. S. Cattaneo, *Integral invariants of 3-manifolds*. Journal of Differential Geometry, 48(1), (1998), 91133. **109 citations**
  - A. S. Cattaneo, C. A. Rossi, *Wilson surfaces and higher dimensional knot invariants*. Communications in Mathematical Physics, 256(3) (2005), 513537. **53 citations**
  - A. S. Cattaneo, P. Mnev, *Remarks on Chern-Simons invariants*. Communications in Mathematical Physics, 293 (3) (2009), 803-836. **69 citations**
- *On the BV-BFV formalism*
  - A. S. Cattaneo, P. Mnev, N. Reshetikhin, *Classical BV Theories on Manifolds with Boundary*. Communications in Mathematical Physics, 332(2) (2014), 535603. **162 citations**
  - A. S. Cattaneo, P. Mnev, N. Reshetikhin, *Perturbative quantum gauge theories on manifolds with boundary*. Communications in Mathematical Physics 357 (2015), 631-730. **102 citations**

Citations: Google Scholar, 08/10/2023
**Books:**

- A. S. Cattaneo, B. Keller, C. Torossian, and A. Bruguié res, Dé formation, Quantification, Thé orie de Lie, Panoramas et Synthése 20 (2005), viii+186 pages.
- A. S. Cattaneo, G. Dito, M. Kontsevich, and D. Sternheimer (guest editors), Special Issue on Deformation Quantization, in SIGMA 4 (2008) and 5 (2009)
- A. Alekseev, A. S. Cattaneo, Y. Kosmann-Schwarzbach, and T. S. Ratiu (guest editors), Special Volume on Poisson Geometry, Lett. Math. Phys. 90, Nos. 13, (2009).
- A. S. Cattaneo, A. Giaquinto, and P. Xu (editors), Higher Structures in Geometry and Physics: In Honor of Murray Gerstenhaber and Jim Stasheff, Progress in Mathematics 287, XV, 362 p. 92 illus., (2011, Birkhäuser, Boston).

**Academic Activities - Summary**

**Invitations** 91 invited talks at conferences, 23 invited lecture series.
**Organization** 17 conferences, 14 schools, 4 research programs.

**Supervision - Summary**

**PhD Students** 12 obtained PhD degree, 5 current students, 5 co-supervised students.
**Postdocs** 12 former postdocs, 1 current postdoc.