

Florence, September 7, 2023

## Curriculum Vitae of Andrea Cappelli

### Personal data

Place and date of birth	Florence, Italy; October 27, 1958.
Address	Istituto Nazionale di Fisica Nucleare, Via G. Sansone, 1, I-50019, Sesto F.no (FI), Italy; tel: +39-338-4841618.
E-mail and web page	andrea.cappelli@fi.infn.it, <a href="https://andrea-cappelli.github.io/">https://andrea-cappelli.github.io/</a>
Family status	Married, one son.

### Academic position

Since February 2001	Director of Research at the Istituto Nazionale di Fisica Nucleare (INFN), section of Florence.
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### Dates

June 1983	Completion of undergraduate studies in physics at the University of Florence: Italian <i>Laurea</i> degree obtained with honors. Title of the thesis: <i>Quantum Chromodynamics and Sum Over Surfaces</i> (supervisor M. Ciafaloni).
November 1986	Completion of the PhD studies in Theoretical Physics, Florence. Title of the thesis: <i>On the Phase Structure of Lattice Spin and Gauge Theories</i> (supervisors M. Ciafaloni, C. Itzykson, J. B. Zuber).
March 1986 – Oct. 1988	Postdoc fellow of the Service de Physique Théorique, CEA Saclay, France.
November 1988	Research permanent position at INFN, Florence.
Febr. 1989 – Febr. 1990	Postdoc fellow of the Niels Bohr Institut, Copenhagen.
Jan. 1991 – Dec. 1992	Postdoc fellow of the Theory Division at CERN, Geneva.
March 1996	First Researcher position at INFN, Florence.
February 2001	Director of Research position at INFN, Florence.

## Research training

Andrea Cappelli studied theoretical physics and quantum field theory at the University of Florence with M. Ciafaloni and M. Ademollo. He learned mathematical and exact methods in field theory with C. Itzykson and J.-B. Zuber (CEA, Paris) and with D. Friedan (Rutgers). As a student and post-doc, he attended several international schools of theoretical physics, in Les Houches, Cargèse, Aspen, Erice and ICTP, Trieste.

## Scientific activity

Andrea Cappelli is mainly working on quantum field theory in low dimension, conformal field theory and exact solutions, and their applications to condensed matter physics and statistical mechanics. His main achievement, with C. Itzykson and J.-B. Zuber, is the A-D-E classification of the minimal models of two-dimensional conformal field theory. He applied conformal field theory to the quantum Hall effect and studied other condensed matter systems in one and two space dimensions. His present focus is on topological phases of matter in three dimensions, mainly their effective field theory description. He is also interested on exact physical consequences of anomalies and their use in hydrodynamics.

Andrea Cappelli wrote more than 60 papers in international scientific journals and edited two books. The complete list of papers can be found in the electronic archives<sup>1</sup>. His publications received about 4000 citations, with two papers having 700 citations.

## Teaching activity

Andrea Cappelli has been teaching at the University of Florence both at undergraduate and graduate level. Since 2005 he teaches Advanced Quantum Field theory of the “Laurea Magistrale”, and each year gives monographic PhD courses, as e.g. on Two-Dimensional Conformal Field Theory. Since 2001, he has been a member of the board of teachers of the PhD school. He has been advisor of seven PhD students and five master students<sup>2</sup>. He has been teaching PhD courses in various universities (Genova, Roma II, Parma, Louvain, Suisse Romande).

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<sup>1</sup>See: INSPIRE, Arxiv and Google Scholar.

<sup>2</sup>Further details can be found in the personal web page: <https://andrea-cappelli.github.io>.

## Seminars and conference talks

Andrea Cappelli has been visiting several universities abroad: for example, in the United States (Chicago, MIT, Princeton, Rutgers, Santa Barbara, Stony Brook) and Europe (Amsterdam, Bruxelles, Cern, Dublin, École Normale in Paris, Cambridge, Stockholm, Wien). Every year he presents his work to some international conferences.

## Academic activity and research coordination

- Organizer of more than twenty international conferences and scientific programs in Italy and abroad<sup>3</sup>.
- Participant to five research networks of the European Community.
- Editor of the journals: *Journal of High-Energy Physics (JHEP)* and *Journal of Statistical Physics (JSTAT)*. Referee of several journals and scientific projects for the Italian Ministry of Research, ANR in France and NSF in the US.
- Coordinator of three INFN national research initiatives: the most recent is *SFT, Statistical Field Theory, Low-Dimensional Systems, Integrable Models and Applications*.
- Member of the local organizing committee of the G. Galilei Institute for Theoretical Physics, Florence<sup>4</sup>.
- Organizer of the annual PhD school *SFT – Lectures on Statistical Field Theories*, at the G. Galilei Institute, Florence.
- 2006-2013: Member of the Italian delegation to the Program Committee of the European Research Council<sup>5</sup>.
- Organizer of the *Interdisciplinary Seminar on Philosophy and Physics* at the University of Florence.

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<sup>3</sup>See: <https://andrea-cappelli.github.io>.

<sup>4</sup>See: <http://www.ggi.infn.it/>.

<sup>5</sup>See: <http://erc.europa.eu/>.