

Serena CENATIEMPO

PERSONAL DATA

BIRTH: Italy – December 20, 1983
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POSITIONS

2016 – present	Postdoc , Mathematics Area – Gran Sasso Science Institute (IT)
2014 – 2016	Postdoc , research group Prof. B. Schlein – University of Zurich (CH)
2013 – 2014	Hausdorff Postdoc , research group Prof. B. Schlein – University of Bonn (DE)
2012 – 2013	Research fellow , supervisor Prof. A. Giuliani – University of Roma Tre (IT)

EDUCATION

02/2013	PhD in Physics, supervisor Prof. A. Giuliani – Sapienza, University of Rome(IT)
10/2008	Master degree in Physics, supervisor Prof. R. Figari – University of Napoli (IT)
03/2006	Bachelor degree in Physics, supervisor Prof. R. Figari – University of Napoli (IT)

PUBLICATIONS

- [1] *The excitation spectrum of Bose gases interacting through singular potentials*, with C. Boccato, C. Brennecke and B. Schlein, math-ph/1704.04819 accepted for publication on J. Eur. Math. Soc. (2017)
- [2] *Complete Bose-Einstein condensation in the Gross-Pitaevskii regime*, with C. Boccato, C. Brennecke and B. Schlein, math-ph/1703.04452 accepted for publication on Commun. Math. Phys. (2017)
- [3] *Analysis of fluctuations around non linear effective dynamics*, contribution to the volume “Advances in Quantum Mechanics: Contemporary Trends and Open Problems”, G. Dell’Antonio and A. Michelangeli eds., Springer-INdAM series (2017)
- [4] *Quantum Many-Body Fluctuations Around Nonlinear Schrödinger Dynamics*, with C. Boccato and B. Schlein, Ann. Henri Poincaré 18: 113 (2017)
- [5] *Renormalization theory of a two dimensional Bose gas: quantum critical point and quasi-condensed state*, with A. Giuliani, Jour. Stat. Phys. 157, 755-829 (2014)
- [6] *Low dimensional interacting bosons*. PhD Thesis, math-ph/1211.3772 (2013)

TALKS

- 2017** - Mathematical Questions and Challenges in Quantum Electrodynamics and its Applications, Oberwolfach (DE) - *workshop*
- Quantissima in the Serenissima II, Venice (IT) - *conference*
- Non linear dispersive PDE, quantum many particle systems and the world between, Cortona (IT) - *graduate school*
- Trieste Quantum Days 2017, Trieste (IT) - *conference*
- 2016** - Sapienza, University of Rome (IT) - *three lecture talks and seminar*
- Contemporary Trends in the Mathematics of Quantum Mechanics, Rome (IT) - *conference*
- SISSA, Trieste (IT) - *seminar*
- GSSI, L'Aquila (IT) - *seminar*
- 2015** - Renormalization in Statistical Physics and Lattice Field Theories, Montpellier (FR) - *conference*
- Trials in Quantum Mechanics and Surroundings 2015, Como (IT) - *conference*
- LMU, Munich (DE) - *seminar*
- University of Stuttgart (DE), *double talk*
- 2014** - Mathematical Physics, Analysis and Stochastics, Heidelberg (DE) - *conference*
- Many-Body Quantum Systems, Warwick (UK) - *conference*
- University of Roma Tre (IT) - *seminar*
- 2013** - ETH-Zurich (CH) - *seminar*
- 2012** - University of Milano (IT) - *seminar*
- ICMP 12, topical session, Aalborg (DK) - *conference*
- Quantum Mechanics and surroundings, L'Aquila (IT) - *conference*

EVENTS BY INVITATIONS AND VISITS

- Sept. 2017 Workshop “Mathematical Questions and Challenges in Quantum Electrodynamics and its Applications”, Oberwolfach (DE) - 1 week
- Sept. 2016 Workshop “Many-Body Quantum Systems and Effective Theories”, Oberwolfach (DE) - 1 week
- May 2016 Workshop “The Renormalization Group”, Oberwolfach (DE) - 1 week
- Nov. 2012 University of Rouen (FR), by invitation of Dr. Margherita Disertori – 1 week
- May 2012 Hausdorff Trimester Program, Bonn (DE) – 3 weeks
- March 2011 Workshop “The Renormalization Group”, Oberwolfach (DE) - 1 week

TEACHING

- 2016 – 2017 Teaching activities at GSSI, L'Aquila
Introduction to quantum many particle problems (PhD course)
Effective equations for many body quantum systems (PhD course)
- 2014 – 2015 Teaching activities at the Institute of Mathematics, University of Zurich
Teaching assistant for Analysis 3 (2nd year class, ODEs and measure theory)
Teaching assistant for the course on *Thomas–Fermi and Hartree–Fock theory for atoms and molecules* (master and graduate students)
- 2010 – 2012 Teaching activities at University Campus Biomedico, Rome
Teaching assistant for *Mechanics and Thermodynamics* (1st year class)

OTHER ACTIVITIES

- Referee for Ann. Henri Poincaré, Commun. Math. Phys., Jour. Stat. Phys.

LANGUAGES

Italian:	mother-tongue
English:	fluent, C1 level
German:	intermediate, B1 level
French:	elementary, A2 level

Last update: October 25, 2017