Curriculum Vitae of Pietro Smacchia

Personal Details

Name: Pietro Smacchia

Birthplace and Date: Bari, 13th of June, 1987

Nationality: Italian

Phone: +1 917 215 4351

Email: pietro.smacchia@gmail.it

EDUCATION

11/2010-Present | Phd Student

SISSA, Trieste - Italy, Statistical Physics program

Supervisor: Alessandro Silva

09/2008-07/2010 | Master Degree in Theoretical Physics

Physics Department "M. Merlin", University of Bari - Italy

exams average grade of 30/30. final mark 110/110 cum laude

Thesis (in Italian):

Entanglement and Quantum Phase Transitions

Supervisor: Saverio Pascazio

09/2005-07/2008 | Bachelor Degree in Physics

Physics Department "M. Merlin", University of Bari - Italy

final mark 110/110 cum laude

Thesis (in Italian):

Entanglement and Neutrino Oscillation

Supervisor: Saverio Pascazio

09/2000-06/2005 | High School Degree (100/100)

Liceo Classico "Q. O. Flacco", Bari (BA) - Italy

Computer Skills

Programming Languages: C, Fortran 90, Python Computational softwares: Mathematica, MatLab

Productivity: Excel, Power Point, Latex, Word, Numbers, Keynote, Pages

Operating Systems: Linux, Mac OSX, Windows

LANGUAGE KNOWLEDGE

Italian: Mother tongue

English: Professional working proficiency

PUBLICATIONS

- 1. P. Smacchia, D. Abanin, E. Demler, A. Silva Dynamical phase transitions and the statistics of the defects produceded in a double quench, to be submitted to Phys. Rev. Lett.
- 2. A. Maraga, P. Smacchia, M. Fabrizio, A. Silva, Breakdown of adiabaticity for the order parameter in a low dimensional gapped system, arXiv: 1402.2789
- 3. P. Smacchia, A. Silva, Work distribution and edge singularities for generic time-dependent protocols in extended system, Phys. Rev. E 88, 042109 (2013)
- 4. P. Smacchia, A. Silva, Universal Energy Distribution of Quasiparticles emitted in a Local Time-Dependent Quench, Phys. Rev. Lett. 109, 037202 (2012)
- 5. P. Smacchia, L. Amico, P. Facchi, R. Fazio, G. Florio, S. Pascazio, V. Vedral, *Statistical mechanics of the cluster Ising model*, Phys. Rev. A **84**, 022304 (2011)

SCHOOL AND CONFERENCES

- 19/08/2013-30/08/2013: Quantum Many-Body Systems out of Equilibrium, Max Planck Institute for Complex Systems, Dresden Germany. Short talk given: Statistics of the work for generic protocols in extended systems
- 30/07/2012-24/08/2012: Summer School: Interacting Quantum Systems out of Equilibrium, Ecole de Physique des Houches, Les Houches France

INVITED SEMINARS

• 05/11/2013: ICTP, Trieste, Italy

• 25/02/2014: Rutgers University

• 06/03/2014: Max Planck Institute for Complex Systems, Dresden