Positions

- 2017-now, Post-doc (assegnista), Scuola Normale Superiore, Pisa, Italy. Research period: from 2/1/2017 (current position).
- 2014-2016, Post-doc (assegnista senior), National Research Council (CNR-Nano), Pisa, Italy. Research period: from 1/08/2014 to 31/12/2016.
- 2012-2014, Post-doc (assegnista), Scuola Normale Superiore, Pisa, Italy. Research period: from 2/05/2012 to 30/04/2014.

QUALIFICATIONS

- 10/04/2017, National Scientific Habilitation as Associate Professor in Theoretical (Condensed Matter) Physics [02/B2, FIS/03].
- 6/6/2012, PhD in Physics, University of Potsdam, Germany, Evaluation: Summa cum laude, Supervisor: Prof. Jens Eisert.
- 30/10/2008, Master's degree in Physics, University of Camerino, Italy. Final mark: 110/110 cum laude.
- 18/10/2006, Bachelor's degree in Physics, University of Camerino, Italy. Final mark: 110/110 cum laude.

AWARDS AND **FELLOWSHIPS**

2013, P.I. of the research project Progetto Giovani Ricercatori 2013, Title: "Spontaneous synchronization and entanglement", Founded by: Scuola Normale Superiore, Pisa.

2009, Angelo Battelli award assigned by the Italian Physical Society. 2003-2007, University Scholarship, "Borsa di eccellenza UniCam". 2003-2007, University Scholarship, "Borsa di merito UniCam".

2003, Physics Department Prize for 1st year students, University of Camerino.

TUTORING EXPERIENCE

Teaching and 2016-2017, Teaching assistant, Quantum Mechanics, Scuola Normale Superiore, Pisa. 2015-2016, Teaching assistant, Quantum Mechanics, Scuola Normale Superiore, Pisa.

2014-2015, Teaching assistant, Quantum Mechanics, Scuola Normale Superiore, Pisa. 2012-2013, Teaching assistant, Statistical Physics, Scuola Normale Superiore, Pisa.

2013-2017, tutor of 4 PhD students: G. De Palma, M. Rosati, V. Cavina, S. Cusumano.

2014-2015, Co-supervisor of 1 Master's student (V. Cavina), University of Pisa.

OTHER EXPERIENCES

Aug. 2010, Summer school, (Quantum and Non-Linear Optics), Sanjberg Estate, Denmark.

Nov. 2010, 1 week visit, Quantum Optics Group, University of Innsbruck, Austria.

Mar. 2008, School on gravitational waves, Virgo EGO, Cascina (Pisa), Italy.

INVITED TALKS Sept. 2016, Invited talk, Testing the limits of quantum superpositions, ECT, Trento, Italy.

Jan. 2016, Colloquium, IQST, University of Ulm, Ulm, Germany.

Jan. 2016, Special Seminar, Max Planck Institute of Quantum Optics, Munich, Germany.

Jan. 2015, Plenary speaker, Quantum Information Processing 2015, Sydney, Australia.

Feb. 2014, Invited seminar, Physics Division, University of Camerino, Italy.

Gen. 2014, Invited talk, Frontiers of Opto- and Electro- Mechanical Systems, Trento, Italy.

May 2011, Group Seminar, QUINFO, University College London.

Oct. 2010, Invited talk, Foundations and Open Systems II, University of Turku, Finland.

OTHER TALKS AND POSTERS

Mar. 2017, Talk, 5th Quantum Thermodynamics Conference, Oxford, UK. [best talk prize]

Feb. 2016, Talk, QO-QI group, University of Camerino, Italy.

Sept. 2014, Talk, SIF National Congress, Pisa, Italy.

Oct. 2013, Talk, IQIS2013, Como, Italy.

Oct. 2013, Poster, NIQ-QS, Ettore Majorana Centre, Erice, Italy

June 2013, Poster, QIPC2013, Florence, Italy.

June 2013, Talk, Central European Workshop on Quantum Optics, Stockholm, Sweden.

June 2011, Workshop, Quantum Information, Benasque, Spain.

Mar. 2011, Talk, DPG spring meeting, Dresden, Germany.

Mar. 2010, Poster, Gordon Conference (optomechanics), Galvestone, Texas, USA.

Mar. 2010, Talk, DPG spring meeting, Hannover, Germany.

May 2010, Talk, Extended A2 Workshop, Reisensburg, Germany.

Oct. 2009, Talk, QQQ meeting, Frei Universität, Berlin, Germany.

Sept. 2009, Talk, SIF National Congress, Bari, Italy.

REFEREE ACTIVITY

Nature Communications, Physical Review Letters, Physical Review A and E, New Journal of Physics, Journal of Physics A and B, Physica Scripta, Journal of Mathematical Physics, IEEE Transactions on Information Theory, EPJ plus, QIP Conference, Scientific Reports, Quantum Science and Technology (IOP).

Publications DETAILS

The length of my research activity is less than 10 years.

I am author of 4 pre-prints and 28 publications in peer-reviewed scientific journals including: Nature Photonics, Nature Communications and PRL. A list of selected publications is attached. My current h-index is 13 (Google Scholar).

Google Scholar profile. [scholar.google.it/citations?user=T7KlX-wAAAAJ&hl=it]: Thomson Reuters, Researcher ID: I-5535-2012. [www.researcherid.com/rid/I-5535-2012]

Press COVERAGE

Minimizzazione e maggiorizzazione dell'entropia, NormaleNews, 5/12/2014. [Link]

Focus: Cooling with a Warm Glow, Physics 5, 36, 23/03/2012. [Link]

Cooling with heat, PhysicsWorld, 19/04/2011. [Link]

Research INTERESTS

My main research experience is in the fields of non-equilibrium quantum systems and theoretical quantum optics, with a particular focus on the mathematical modeling and the numerical simulation of open quantum dynamics.

Data, 22/5/2017

Lubres Hari