



Personal data

Name : Jean-Marie Stéphan
Date of birth : June 4, 1983
Place of birth : Angers, France
Nationality : French
Affiliation : Institut Camille Jordan, UMR 5208, University of Lyon 1
E-mail : stephan@math.univ-lyon1.fr
Webpage : <http://math.univ-lyon1.fr/~stephan/>

Research education

Since 10/2016 : Permanent CNRS researcher at Institut Camille Jordan, University of Lyon, on an exchange position between the Physics and Mathematics Institutes of CNRS.
09/2014-2016 : Postdoc at the “Max Planck Institute for the Physics of Complex Systems”, Dresden (Germany), with Frank Pollmann (now in TU Munich).
01/2012-2014 : Postdoc at the Physics Department of the University of Virginia, Charlottesville (US), with Paul Fendley (now in Oxford).
2008-2011 : PhD at the “Institut de Physique Théorique (IPhT)”, CEA-Saclay, under the supervision of Vincent Pasquier and Grégoire Misguich. Title “[Entanglement in low dimensional quantum systems](#)”.
Teaching at the University of Paris-Saclay (Orsay).
2006-2008 : Master student at the University of Orsay (“Fundamental Physics”, M1) and then Orsay/ENS Paris (“Quantum Physics”, M2). Internships with Frédéric Piéchon (“Transport in ferromagnetic quantum junctions”, M1) and Grégoire Misguich (“Classical and quantum dimer models”, M2).

Main areas of expertise: Mathematical Physics

Quantum entanglement, out of equilibrium quantum dynamics, conformal field theory, limit shapes and statistical mechanics.

Publications

26+ papers published in selective physics journals. The full list is available on [Google Scholar](#).

Some talks and invited international conferences

Free fermions at the edge of interacting systems, Osaka (Japan), 2019.
Free fermions at the edge of interacting systems, Stony Brook (US), 2018.
Strange effects of integrability in a simple out of equilibrium problem, Montreal (Canada) 2018.
Entanglement scaling in 1d critical states (slightly) beyond the usual CFT, Florence (Italy) 2018.
Quantum quenches in the XXZ chain via six-vertex model with domain wall boundary conditions, Natal (Brazil), 2018.
Inhomogeneous quantum quenches in the XXZ spin chain, Lyon (France), 2017.
From Quantum Field theories to Numerical methods, Nordita (Sweden), 2016.
Entanglement evolution after quantum quenches, and the arctic circle, Benasque (Spain), 2016.
Correlations and inhomogeneous field theory inside the arctic circle, Florence (Italy), 2015.
Entanglement and information in classical and quantum systems, Cologne (Germany), 2014.
Entanglement in simple 2d critical wave functions, Perimeter Institute (Canada), 2013.
Correlations and Entanglement in Many-body Systems Out of Equilibrium, Taipei (Taiwan), 2012.
Physics in the plane: From condensed matter to string theory, Les Houches (France), 2010.
Symposium on Topological Quantum Computing, Institut Henri Poincaré, Paris (France), 2009.

Various other seminars

Anney, Cergy-Pontoise, Cologne, Dresde (3), Lille, Lyon (5), Maynooth, Nancy, Natal, Paris (4), Pont-a-Mousson, Orsay (2), Regensburg, Saclay (3), Strasbourg, Toulouse (2), Tours, Trieste, Yale, etc.

Teaching

Statistical and Condensed Matter Field Theory School. School for PhD students and young researchers in theoretical physics, Institut Henri Poincaré, Paris 2019. Lectures on “extreme boundary conditions and random tilings”.

Tutorials and labworks in mathematics at the University of Lyon 1: License 2 & 3, Master 1.

Supervision

Master thesis (9 months) of Saverio Bocini (University of Florence), from September 1, 2019: “Classical and quantum inhomogeneous systems”.

Funding

I am a member of the ANR-18-CE40-0033 grant *dimers*.

I am also a member of the IDEX-Lyon breakthrough project ToRe.

Non exhaustive list of recent collaborators

Alvise Bastianello (Postdoc, Amsterdam, The Netherlands).

Michael Brockmann (Postdoc, Wuppertal, Germany).

Pasquale Calabrese (Professor, SISSA, Italy).

Jérôme Dubail (CNRS Researcher, Nancy, France).

Benoit Estienne (MCF, Jussieu, France).

Paul Fendley (Professor, Oxford).

Masudul Haque (Faculty member, Maynooth, Ireland).

Roger Melko (Professor, Perimeter Institute, Canada).

Frank Pollmann (Professor, TU Munich, Germany).

Cécile Repellin (CNRS Researcher, Grenoble, France).

Jacopo Viti (Assistant Professor, Natal, Brazil).