

Education

2010 – ...	PhD in theoretical physics , Supervisors : Jesper Jacobsen (LPTENS) and Hubert Saleur (IPhT, CEA Saclay) <i>"Low dimensional field theories and disordered electrons"</i>
2009 – 2010	Master's degree in theoretical Physics , École Normale Supérieure, Paris. <i>with highest distinction, grade average 19.13/20, Rank : 1st.</i>
2008 – 2009	1st year of Master's degree in Physics , École Normale Supérieure, Lyon. <i>with highest distinction, grade average 19/20, Rank : 1st.</i>
2007 – 2008	B.Sc. in Physics , École Normale Supérieure, Lyon. <i>with highest distinction, grade average 18.5/20, Rank : 1st.</i>
2007	Admitted at "École Normale Supérieure", Lyon <i>also admitted at the École Polytechnique and at ENS Ulm (Paris).</i>
2005–2007	Classes préparatoires (PCSI/PC*) , Lycée Champollion, Grenoble. <i>Intensive preparation for the competitive exams for French "Grandes Écoles". Specializing in Physics, Mathematics and Chemistry.</i>
2005	"Baccalauréat Scientifique" , Grade "Très Bien", Lycée Emile Loubet, Valence

Awards and Scholarships

2011 – 2014	ENS PhD Scholarship with T.A. position, CEA Grant (CFR).
2007 – 2011	Student of the Ecole Normale Supérieure ("normalien") 4-year Scholarship to study at ENS.
2007	<i>Nationwide competitive exams :</i> Admitted at the "École Polytechnique" <i>(declined), and at the "École Normale Supérieure" Paris (declined) and Lyon.</i>
2007	Recipient of the "leg Baffert" award , Lycée Champollion.

Conference talks and seminars

2012	Invited seminar, Rudolf Peierls Centre for Theoretical Physics Oxford University (Oxford, UK) <i>"Logarithmic observables in critical percolation"</i>
2011	Invited talk at the Logarithmic CFT and representation theory workshop Institut Henri Poincaré (Paris, France) <i>"Indecomposability parameters in Logarithmic CFT"</i>
2011	Laboratory Seminar LPTENS (Paris, France) and IPhT (CEA Saclay, France) <i>"Indecomposability and logarithms in field theory"</i>

Short-term research projects

2010	Traffic, Jamming and microfluidic Supervisor : D. Bartolo, ESPCI, Paris. (two months).
2009	Strain pseudo-spins and spin glass models for ferroelastic materials Supervisor : T. Lookman, Los Alamos (NM), USA. (three months).
2008	Dead water phenomenon and interfacial waves in stratified fluids Supervisors : T. Dauxois & M. Mercier, ENS Lyon. (two months). <i>See New Scientist article, Video on YouTube and its commentary (arXiv :0810.1702)</i>

Short-term visits

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| 2012 | All Souls College and Rudolf Peierls Centre for Theoretical Physics
Oxford University (Oxford, UK).
<i>Invited by Dr. F. Burnell.</i> |
| 2011 | Center for nonlinear studies and theoretical division T-11
Los Alamos National Laboratory (New Mexico, USA).
<i>Invited by Pr. T. Lookman.</i> |

Attended Schools and Conferences

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| 2012 | Conformal Invariance, Discrete Holomorphicity and Integrability
University of Helsinki (Helsinki, Finland). |
| 2011 | Logarithmic CFT and representation theory
Advanced Conformal Field Theory and Applications trimester.
Institut Henri Poincaré (Paris, France). |
| 2011 | CFT, topology, and information
Advanced Conformal Field Theory and Applications trimester.
Institut Henri Poincaré (Paris, France). |

Publications

- [1] **Effects of disorder in ferroelastics : a spin model for strain glass**,
R. Vasseur and T. Lookman, *Phys. Rev. B* **81**, 094107 (2010).
- [2] **Traffic Jams and Intermittent Flows in Microfluidic Networks**,
N. Champagne, R. Vasseur, A. Montourcy, and D. Bartolo, *Phys. Rev. Lett.* **105**, 044502 (2010).
- [3] **Microstructure from ferroelastic transitions using strain pseudo-spin clock models in two and three dimensions : a mean-field analysis**,
R. Vasseur, T. Lookman and S.R. Shenoy, *Phys. Rev. B* **82**, 094118 (2010).
Selected as a Phys. Rev. B editors' suggestion.
- [4] **Resurrecting Dead-Water Phenomenon**
M.J. Mercier, R. Vasseur and T. Dauxois, *Nonlin. Processes Geophys.* **18**, 193–208 (2011).
- [5] **Spin Models for Ferroelastics : towards a Spin Glass Description of Strain Glass**
R. Vasseur and T. Lookman, *Solid State Phenom.* **172-174**, 1078–1083 (2011).
Proceedings of the PTM 2010 conference (Avignon).
- [6] **Indecomposability parameters in chiral Logarithmic Conformal Field Theory**
R. Vasseur, J.L. Jacobsen and H. Saleur, *Nucl. Phys. B* **851**, 314–345, (2011).
- [7] **The puzzle of bulk conformal field theories at central charge $c = 0$**
R. Vasseur, A. Gainutdinov, J.L. Jacobsen and H. Saleur, *Phys. Rev. Lett.* **108**, 161602 (2012).
- [8] **Critical properties of joint spin and Fortuin-Kasteleyn observables in the two-dimensional Potts model**
R. Vasseur and J.L. Jacobsen, *J. Phys. A : Math. Theor.* **45**, 165001, (2012).
Selected for inclusion in "IOP Select" and to make the cover of the Issue 16, Vol. 45 of JPA.
- [9] **Lattice fusion rules and logarithmic operator product expansions**
A. M. Gainutdinov and R. Vasseur, *Submitted to Nucl. Phys. B.*
- [10] **Logarithmic observables in critical percolation**
R. Vasseur, J.L. Jacobsen and H. Saleur, *Accepted for publication in J. Stat. Mech.*

Teaching

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| 2011-2013 | Teaching Assistant in Physics and Mathematics ,
Université Pierre et Marie Curie (Paris 6 Jussieu) |
| 2010-2011 | Oral examinations in Physics , Lycée Louis le Grand, Paris, PCSI
(undergraduate level) |
| 2008 | Oral examinations in Physics , Lycée La Martinière, MP* |

Languages

French, English.

Japanese and Spanish : beginner.

Computer skills

Operating Systems : Windows, Linux.

Programming and other : daily use of C/C++, L^AT_EX, Matlab, Mathematica ...