

# Pierre HOUDEBERT

Post-Doc, I2M, Marseille, France

January 2018

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## Personal Informations

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Born February 2<sup>nd</sup> 1990 in Tours, France.  
French Nationality.

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Aix-Marseille Université, Technopôle Château-Gombert,  
39 rue F. Joliot Curie, 13453 Marseille Cedex 13 FRANCE.

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## Education

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<b>May 2017</b>	Ph.D in applied mathematics, Lille 1 University, France. Thesis : Continuum Random Cluster Model. Advisor : David DEREUDRE, professor, Lille 1 University.
<b>2014</b>	French Agregation of mathematics. Rank : 26/275.
<b>2013</b>	Master's degree in mathematics , speciality probability and statistics. With Honours, Rennes 1 University, France.
<b>2011</b>	Bachelor's Degree in mathematics. With Honours, Paris-Sud 11 University.

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## Research Interests

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- Statistical mechanics and Gibbs point processes.
- Continuum Random Cluster Model.
- Fortuin-Kasteleyn representation.
- Percolation theory.
- Phase transition.

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## Publications

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- 2017+** D. DEREUDRE and P. HOUDEBERT, *Phase transition for continuum Widom-Rowlinson model with random radii*, arXiv:1712.01729.
- 2017+** C. HOFER-TEMMELE and P. HOUDEBERT, *Disagreement percolation for marked Gibbs point processes*, arXiv:1709.04286.
- 2018** P. HOUDEBERT, *Percolation results for the continuum random cluster model*, Adv. Appl. Prob. 50.1.
- 2015** D. DEREUDRE and P. HOUDEBERT, *Infinite volume continuum random cluster model*, Electron. J. Probab. 20 no. 125.
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## Scientific Talks

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- January 2018** Uniqueness of Gibbs point processes.  
Workshop on Transformations and phase transitions,  
Bochum, Germany.
- October 2017** Existence and uniqueness of Gibbs point processes.  
Probability seminar, IRMAR, Rennes, France.
- September 2017** Existence and uniqueness of Gibbs point processes.  
Probability seminar, I2M, Marseille, France.
- December 2016** Percolation of the Continuum Random Cluster Model.  
Probability seminar, CWI, Amsterdam, Netherlands.
- June 2016** Continuum Random Cluster Model.  
AU Workshop on stochastic geometry, stereology and their applications,  
Sandbjerg, Denmark.
- January 2016** Continuum Random Cluster Model.  
Workshop on Continuum Percolation, Lille, France.
- January 2016** Continuum Random Cluster Model.  
Probability seminar, Institut Fourier, Grenoble, France.
- November 2015** Continuum Random Cluster Model.  
Statistical mechanics seminar, Warwick University, England.
- October 2015** Continuum Random Cluster Model.  
Probability seminar, Laboratoire Paul Painlevé, Lille 1 university,  
France.
- August 2015** Continuum Random Cluster Model.  
Stochastic Geometry Days, Poitiers, France.
- October 2014** Widom-Rowlinson Model.  
Berlin-Padova Workshop, Berlin.

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## Teaching

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- Winter 2017** Series and probabilities (24 hours).  
L2 PEIP, Polytech Lille, France.
- Autumn 2016** Differential and integral calculus (40 hours).  
First year biology students, Lille 1 university, France.
- Autumn 2016** Programming in R for statistics (24 hours).  
Fourth year biology students, Lille 1 university, France.
- Winter 2016** Probability and statistics, exercises and programming (36 hours).  
Second year informatics students, Lille 1 university, France.
- Autumn 2015** Differential and integral calculus (30 hours).  
Second year engineer students, Polytech Lille, France.
- Winter 2015** Series, power series, Fourier series (30 hours).  
Second year physics students, Lille 1 university, France.
- Winter 2015** Matrix, exercises (15 hours).  
Second year economics students, Lille 1 university, France.
- Autumn 2014** Differential and integral calculus, exercises (15 hours).  
Second year economics students, Lille 1 university, France.

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## Other Skills

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- Languages** French : Native Language.  
English : Fluent.  
German : Notion.
- Computer** Scilab, Matlab, Latex, R, Git.