

# Publication list

## PUBLISHED

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- 1 Subcritical phase of  $d$ -dimensional Poisson-Boolean percolation and its vacant set** (2020)  
H. Duminil-Copin, A. Raoufi, V. Tassion  
*Annales Henri Lebesgue*, vol. 3, pp. 677–700.
- 2 Long monotone trails in random edge-labelings of random graphs** (2020)  
O. Angel, A. Ferber, B. Sudakov, V. Tassion  
*Combinatorics, Probability and Computing*, vol. 29, no. 1, pp. 22–30.
- 3 Emergent planarity in two-dimensional Ising models with finite-range interactions** (2019)  
M. Aizenman, H. Duminil-Copin, V. Tassion, S. Warzel  
*Inventiones Mathematicae*, vol. 216 no. 3, pp. 661–743.
- 4 Exponential decay of connection probabilities for subcritical Voronoi percolation in  $\mathbb{R}^d$**  (2019)  
H. Duminil-Copin, A. Raoufi, V. Tassion  
*Probability Theory and Related Fields*, vol. 173 no. 1-2, pp. 479–490.
- 5 Sharp phase transition for the random-cluster and Potts models via decision trees** (2019)  
H. Duminil-Copin, A. Raoufi, V. Tassion  
*Annals of Mathematics*, vol. 189 no. 2, pp. 75–99.
- 6 A note on Schramm’s locality conjecture for random-cluster models** (2019)  
H. Duminil-Copin, V. Tassion  
*Sojourns in Probability Theory and Statistical Physics - II Brownian Web and Percolation, A Festschrift for Charles M. Newman*, pp. 123–134.
- 7 Existence of an unbounded vacant set for subcritical continuum percolation** (2018)  
D. Albergh, A. Teixeira, V. Tassion  
*Electronic Communications in Probability*, vol. 23, paper no. 63, 8pp.
- 8 Sharpness of the phase transition for continuum percolation in  $\mathbb{R}^2$**  (2018)  
D. Ahlbergh, A. Teixeira, V. Tassion  
*Probability Theory and Related Fields*, vol. 172 no. 1-2, pp. 525–581.
- 9 The box-crossing property for critical two-dimensional oriented percolation** (2018)  
H. Duminil-Copin, A. Teixeira, V. Tassion  
*Probability Theory and Related Fields*, vol. 171 no. 3–4, pp. 685–708 .
- 10 The Bethe Ansatz for the six-vertex and XXZ models: an exposition** (2018)  
H. Duminil-Copin, M. Gagnebin, M. Harel, I. Manolescu, V. Tassion  
*Probability Surveys*, vol. 15, pp. 102–130.
- 11 A new computation of the critical point for the planar random-cluster model with  $q \geq 1$**  (2018)  
H. Duminil-Copin, A. Raoufi, V. Tassion  
*Annales de l’institut Henri Poincaré*, vol. 54, no. 1, 422–436.
- 12 Critical Percolation and the Minimal Spanning Tree in Slabs** (2017)  
C.M. Newman, V. Tassion, W. Wu  
*Communications in Pure and Applied Mathematics*. vol. 70, pp. 2084–2120.
- 13 Homogenization via sprinkling** (2017)  
I. Benjamini, V. Tassion  
*Annales de l’institut Henri Poincaré*, vol. 53, no. 2, pp. 997–1005.
- 14 Continuity of the phase transition for planar Potts models with  $1 \leq q \leq 4$**  (2017)  
H. Duminil-Copin, V. Sidoravicius, V. Tassion  
*Communications in Mathematical Physics*, vol. 349, no. 1, pp. 47–107.

- [15] Locality of percolation for Abelian Cayley graphs** (2017)  
S. Martineau, V. Tassion  
*Annals of Probability*, vol. 45, no. 2, pp. 1247-1277.
- [16] A new proof of the sharpness of the phase transition for Bernoulli percolation on  $\mathbb{Z}^d$**  (2016)  
H. Duminil-Copin, V. Tassion  
*L'enseignement mathématique*, vol. 62, no. 1-2, pp. 199-206.
- [17] Crossing probabilities for Voronoi percolation** (2016)  
V. Tassion  
*Annals of Probability*, vol. 44, no. 5, pp. 385-3398.
- [18] Absence of percolation for critical Bernoulli percolation on slabs** (2016)  
H. Duminil-Copin, V. Sidoravicius, V. Tassion  
*Communications in Pure and Applied Mathematics*, vol. 69, no. 7, pp. 1739-1411.
- [19] A new proof of the sharpness of the phase transition for Bernoulli percolation and the Ising model** (2016)  
H. Duminil-Copin, V. Tassion  
*Communications in Mathematical Physics*, vol. 343, no. 2, pp. 725-745.
- [20] Quenched Voronoi percolation** (2016)  
D. Ahlberg, S. Griffiths, R. Morris, V. Tassion  
*Advances in Mathematics*, vol. 286, pp. 889-911.
- [21] On the critical value function in the Divide and Color model** (2013)  
A. Bálint, V. Beffara, V. Tassion  
*Latin American Journal of Probability*, vol. X, pp. 653-666.
- [22] Confidence intervals for critical value function in the Divide and Color model** (2013)  
A. Bálint, V. Beffara, V. Tassion  
*Latin American Journal of Probability*, vol. X, pp. 667-679.

## ACCEPTED

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- [23] Upper bounds on the correlation length of Bernoulli percolation on  $\mathbb{Z}^d$**   
H. Duminil-Copin, G. Kozma, V. Tassion  
To appear in *Special volume in honor of Vladas Sidoravicius*.
- [24] Renormalization of crossing probabilities in the planar random-cluster model**  
H. Duminil-Copin, V. Tassion  
To appear in *Dobrushin's volume of Moscow Mathematical Journal*.
- [25] Discontinuity of the phase transition for the planar random-cluster and Potts models with  $q > 4$**   
H. Duminil-Copin, M. Gagnebin, M. Harel, I. Manolescu  
To appear in *Annales de l'École Normale Supérieure*.

## PROCEEDINGS

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- [26] RSW and Box-Crossing Property for planar percolation** (2015)  
V. Tassion, H. Duminil-Copin  
*Proceedings of the International Congress of Mathematical Physics*, vol. 73.

## PREPRINTS

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- [27] **Crossing probabilities for planar percolation**  
L. Köhler-Schindler, V. Tassion  
arXiv:2011.04618.
- [28] **Noise sensitivity via differential inequalities**  
V. Tassion, H. Vanneuville  
arXiv:2011.04572.
- [29] **Long-range order for critical book-Ising and book-percolation**  
H. Duminil-Copin, C. Garban, V. Tassion  
arXiv:2011.04644.
- [30] **Long-range models in 1D revisited**  
H. Duminil-Copin, C. Garban, V. Tassion  
arXiv:2011.04642.
- [31] **Planar random-cluster model: fractal properties of the critical phase**  
H. Duminil-Copin, I. Manolescu and V. Tassion  
arXiv:2007.14707.
- [32] **No exceptional words for Bernoulli percolation**  
P. Nolin, V. Tassion, A. Teixeira  
arXiv:1911.04816.

## UNPUBLISHED WORK

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- [33] **A universal behavior in DaC-percolation**  
V. Tassion  
Available as Chapter 3 of PhD thesis *Planarity and locality in percolation theory*.

## IN PREPARATION

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- [34] **Supercritical percolation on graphs of polynomial growth**  
D. Contreras, S. Martineau, V. Tassion
- [35] **Locality for percolation on graphs of polynomial growth**  
D. Contreras, S. Martineau, V. Tassion
- [36] **A new renormalization approach to Grimmett-Marstrand Theorem**  
D. Contreras, V. Tassion

## BOOK PROJECT

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- [37] **Ising Model**  
H. Duminil-Copin, I. Manolescu, V. Tassion