Matteo D'Achille

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Center for Interdisciplinary Research in Biology Collège de France 11 Place Marcelin Berthelot 75231 Paris Basic Research Division Centre CEA de Saclay D36 91191 Gif-sur-Yvette cedex

Areas of specialization

Statistical mechanics, mathematical physics, numerical methods

Career

2018

2012

2009

2017

PhD Candidate, Université Paris Saclay, Paris, France

Recent activities

Visiting from 18/2 to 4/3 at BANACH CENTER, Institute of Mathematics of the Polish Academy of Sciences (IM PAN), Warsaw, Poland. Website

Education

Laurea Magistrale (MSc) in Theoretical Physics, **110/110 "summa cum laude"**, The University of Milan.

Thesis title: "On two linear assignment problems: random assignment and Euclidean bipartite matching", under the supervision of Sergio Caracciolo and Gabriele Sicuro.

Laurea Triennale (BSc) in Physics, 110/110, The University of Milan.

Thesis title: "La Teoria di Schwarz-Christoffel e il Biliardo Quantistico Poligonale", under the supervision of Luca Guido Molinari

DIPLOMA DI MATURITÀ SCIENTIFICA PNI, 81/100, Liceo Scientifico "Paolo Frisi", Monza (Italy).

Publications

JOURNAL ARTICLES

"Random Euclidean matching problems in one dimension", with S. Caracciolo and G. Sicuro, *Physical Review E* **96** (4), 42102. doi:10.1103/PhysRevE.96.042102

"Finite-size corrections in the random assignment problem", with S. Caracciolo, E. Malatesta and G. Sicuro, *Physical Review E* **95** (5), 52129. doi:10.1103/PhysRevE.95.052129

Schools, conferences, workshops

- "Information transmission in biological systems" conference, Simons Semester on Mathematical Biology, *The Mathematical Research and Conference Center in Będlewo*, Poland. Website
- "Computational approaches to investigating allostery" workshop, CECAM-HQ Ecole Polytechnique Federale de Lausanne, Lausanne, Switzerland. Website

 "26th VI-HPS Tuning Workshop" Laboratoire Exascale Computing Research (ECR), Campus Ter@tec
 - "26th VI-HPS Tuning Workshop", Laboratoire Exascale Computing Research (ECR), Campus Ter@tec, Bruyères-le-Châtel, France. Website
- "Optimal Transport and Applications" conference, *Scuola Normale Superiore*, Pisa, Italy. Website
- "Mathematical Physics, Analysis and Stochastics" summer school, *Ruprecht Karls Universität*, Heidelberg, Germany. Website

Scientific societies

- European Physical Society, individual member
- 2013- Italian Physical Society, voting member

Service to the profession

2017- American Physical Society, referee for Physical Review journals and Reviews of Modern Physics