

CLAIRE MATHIEU. Research director (DR1) in Computer Science at CNRS (*Centre National de la Recherche Scientifique*), since 2012. Doing research on Algorithms.

BASIC INFORMATION :

claire.m.mathieu@gmail.com. IRIF, Université de Paris, Case 7014, 75205 Paris CEDEX 13, France. <https://www.irif.fr/~claire/>. Born 9/3/65.

EDUCATION. *Habilitation* (Lyon I, 1996) & PhD (Paris XI, 1988) in Computer Science. 1983-88: Student, Ecole Normale Supérieure (“Sèvres” until 1986).

AWARDS. CNRS Silver medal (INS2I Institute), 2019. Collège de France Annual Chair (2017). INFORMS Computing Society ICS Prize for Research Excellence in the Interface Between Operations Research and Computer Science (2007). Junior member of “Institut Universitaire de France” (2002). Prix IBM Jeune Chercheur (1991).

PREVIOUS POSITIONS. Professor at Collège de France, annual Chair “Informatique et Sciences Numériques”, 2017-18. *Professeur associé* at the Computer Science department of Ecole Normale Supérieure, 2014-16. Professor at: Brown University (USA), 2004-12, Ecole Polytechnique, 2002-04, Université Paris-Sud, 1997-2002. Researcher at CNRS: Ecole Normale Supérieure of Lyon, 1991-97, Ecole Normale Supérieure, 1990-91. Post-doc at DIMACS, 1989-90. INRIA Post-doc at Princeton, 1988-89.

PHD STUDENTS.

Nicolas Schabanel, Jérémy Barbay, Aparna Das, Warren Schudy, David Eisenstat, Hang Zhou, Vincent Cohen-Addad, Frederick Mallmann-Trenn, Victor Verdugo, Mathieu Mari, Simon Mauras, Max Dupré.

INVITED TALKS. STACS 2004, MAPSP 2007, WAOA 2010, SoCG, ICALP 2014, SODA 2015, HALG 2017, ICGT 2018, ESA 2018, SIROCCO 2018, WIDS 2019, etc.

TEACHING. Collège de France course on Algorithms, 2017-18. Two MOOCs (Coursera-ENS) on Approximation algorithms, 2014-15. Co-author of two books of exercises on algorithms, 1991-93. Etc.

RESPONSABILITIES. Co-organization of scientific meetings: Dagstuhl workshops, Highlights of Algorithms, ICERM semester, IHP trimester, IEEE FOCS 2007, MSRI Semester, etc. Head of the TALGO research group at the CS department of ENS, 2012-16. Member of the Brown University CS department PhD Admissions Committee, 2004-2011. Orsay University Coordinator of *DEUG Informatique*, 1998-2002.

Comité d’impact: Open Classrooms, 2019. Conseils scientifiques: CNRS (2018-), GDR IM (2017-), SIF (2012-19). Conseil d’Administration: EPHE (2018,-). EATCS Council (2017-). Comité de Programmation Scientifique: IHP, 2014-18. Advisory board: CEMPI, 2012-19. Presburger Award Committee, 2014-16. SODA Steering Committee, until 1/2014.

Journal editor: SIAM Journal on Computing, 2010-2015; Algorithmica, 2004-2010. Program committees: ESA’19, ACM STOC’18, HALG 2017, IEEE FOCS’15, WG ’14, APPROX’16 (Chair), APPROX ’13, APPROX’10, APPROX’07, APPROX’01, APPROX’98, SODA’09 (Chair), SODA’03, SODA’00, SODA’98, STOC’05, FOCS’02, STACS 2011, STACS ’99, ICALP’02, ESA’04, ANALCO’06, WAOA’04, RANDOM’98.

GRANTS. NSF Theory Foundations CCF-0728816, P.I. NSF AF, Medium: Collaborative Research, Co-P.I. 0964037. ANR PI, 2019-22. ANR co-PI, 2012-17.

BROADER IMPACT. With S. Abiteboul, *Entretiens autour de l’informatique* on the blog Binaire hosted by *Le Monde*. Many radio shows, newspaper interviews and talks for the general public. Audition by the Senat committee on numerical sovereignty. With H. Gimbert, work on the platform *Parcoursup*.

SOME PUBLICATIONS. *Local search yields approximation schemes for k-means and k-median in Euclidean and minor-free metrics.* V. Cohen-Addad, P. Klein, C. Mathieu. SIComp, 2019. *Homophily and the Glass Ceiling Effect in Social Networks.* C. Avin, B. Keller, Z. Lotker, C. Mathieu, D. Peleg, Y.-A. Pignolet: ITCS 2015. *On the sum-of-squares algorithm for bin packing.* J. Csirik, D. S Johnson, C. Kenyon, J. B Orlin, P. W Shor, R. R Weber. JACM, 2006. *A near-optimal solution to a two-dimensional cutting stock problem,* C. Kenyon, E. Rémila, Math. of OR, 2000. *A Critical Phenomenon in a Broadcast Process.* W. Evans, C. Kenyon, Y. Peres, L. Schulmann. Annals of Applied Probability, 2000.