

Nicolas Ecker

Collège de France
11, place Marcelin Berthelot, 75005 Paris, France
Nicolas.ecker@college-de-france.fr



Education

03/2020 PhD in Physics, University of Geneva, Switzerland
01/2016 Master of Science Biophysics, Saarland University, Germany
09/2013 Bachelor of Science Biophysics, Saarland University, Germany
06/2010 general qualification for university entrance, Gymnasium am Krebsberg, Neunkirchen, Germany

Employment History

04/2021 – present postdoctoral researcher with H. Turlier, Collège de France
04/2020 – 03/2021 postdoctoral researcher with K. Kruse, University of Geneva
12/2016 – 04/2020 research fellow with K. Kruse, University of Geneva
02/2016 – 11/2016 research fellow with K. Kruse, Saarland University
11/2014 – 01/2016 teaching assistant, Dpt. of Theoretical Physics, Saarland University

Teaching Experience

09/2017 – 03/2021 teaching assistant, Biochemistry Dpt, University of Geneva (4x 40h training course in programming)
11/2014 - 1/2016 teaching assistant, Theoretical Physics, Saarland University (2x 80h “Informationstechnische Grundlagen für Physiker” I and II, 2015-16, 40h Mathematical Methods in Physics, 2014-15)

Achievements

Awards:

- 2014: Bronze medal at the “international genetically engineered machine” (iGEM) competition, final conference in Boston (MS)
- 2010: Awards for the best A-level grades in mathematics

Memberships:

- German physical society DPG (2010 - present)

Scientific communication

Conference talks:

- “Collective cell migration driven by spontaneous actin waves” at the Circle Meeting, Saarbrücken, Germany (2019)
- “A phasefield approach for studying actin-wave driven cell migration” at the Geneva Chemistry & Biochemistry Days, Switzerland (2018)
- “Cell motility driven by spontaneous actin waves” at the Circle Meeting, Paris, France (2016)

Conference posters:

- “A phase-field approach for studying actin-wave driven cell migration”, Cell Physics, Saarbrücken, Germany (2019)
- “A phase-field approach for studying actin-wave driven cell migration”, Cell Physics, Saarbrücken, Germany (2017)
- “Cell motility generated by actin polymerization waves”, Circle Meeting, EMBL Heidelberg, Germany (2017)
- “Cell motility generated by actin polymerization waves”, 623. WE-Heraeus-Seminar ‘Cellular Dynamics’ in Bad Honnef, Germany (2016)
- “Cell motility generated by actin polymerization waves”, DPG meeting, Regensburg, Germany (2016)

Invited talks:

- „Deterministic actin waves and their role in cell motility”, Frisbi seminar at ISTA, Vienna (online, 24/06/2022)
- „Deterministic actin waves and their role in cell motility”, Theoretical physics seminar at Institut Curie, Paris (30/06/2022)

Public outreach:

- „Declics” Q&A for students at Lycée Gabriel Fauré (Paris) (12/2022)

Publications

- L. Stankevics*, N. Ecker* et al: *Deterministic actin waves as generators of cell polarization cues*. PNAS 117 (2) 826-835 (2020)
- N. Ecker* and K. Kruse: *Excitable actin dynamics and amoeboid cell migration*. PLOS ONE 16(2): e0246311(2021)

* (co-)first author