

Scientific Networks and Success

An online Satellite Workshop of CCS 2020

Every researcher is affected by how scientific performance is measured. How should it be measured? Do we have the right data to do it? Data is gaining importance in scientific evaluation, but it can be both used and abused to guide hiring decisions as well as national research policy. Very sophisticated success measures have been developed. However, do they measure what they claim and if so, how much of the tedious research efforts do they really reflect?

Modern research is also a team sport which is shaped by various social forces. Collaborations affect the success of individual scientists. Additionally, scientific success and careers depend on mobility across countries and research institutions. Indeed, academic careers span different spatial scales, e.g., countries, cities and institutions. To better understand these phenomena, new models and methods have emerged from the collaboration of experts from different fields, taking a complex systems perspective. This half day-long Satellite Workshop is a forum to discuss and present these developments critically.

Session 1: Scientific Collaborations and Success (13:30 - 14:40)

- Gender differences in productivity and collaboration networks of top-ranked academics Ana Maria Jaramillo (University of Exeter, UK)
- Effects of homophily and academic reputation in the nomination and selection of Nobel laureates Dr. Riccardo Gallotti (Fondazione Bruno Kessler, IT)
- Early coauthorship with top scientists predicts success in academic careers Dr. Giacomo Livan (University College London, UK)

Session 2: Measuring Success in Science (15:00 - 16:00)

- Unbiased evaluation of ranking metrics reveals consistent performance in citation data
 Shuqi Xu (University of Electronic Science and Technology of China, CN)
- Measuring scientific success: Peer review, citations, impact factors, and beyond *Prof. Ludo Waltmann* (Centre for Science and Technology Studies, NL)
- Fuzzy problems and the emergence of neglected research domains Felber J. Arroyave Bermudez (University of California - Merced, US)

Session 3: Understanding Scientific Careers (16:00 - 17:00)

- Impact of geographical distance on acquiring know-how through scientific collaboration Prof. Frank van der Wouden (University of Hong Kong, CN)
- Quantifying the impact of weak, strong, and super ties in scientific careers
 Prof. Alexander Petersen (University of California - Merced, US)
- Memory in scientific careers Dr. Luca Verginer (ETH Zurich, CH)

Wednesday, December 9th, 13.30 – 17.00 details at: **www.success-in.science**