

ATUL TANAJI MOHITE

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EDUCATION

Saarland University Doctoral researcher	<i>Nov 2023 - Present</i>
University of Luxembourg Doctoral researcher	<i>Nov 2020 - Nov 2022</i>
Ludwig Maximilian University, Munich Master of Science in Physics	<i>Oct 2017 - April 2020</i> GPA: 1.3
Indian Institute of Technology, Delhi Bachelor of Technology in Engineering Physics Department of Physics	<i>Jul 2013 - May 2017</i> DGPA: 7.913 / 10

RESEARCH INTERESTS

I am interested in non-linear and non-equilibrium phenomena in physics. This includes many problems in theoretical biophysics and non-equilibrium statistical physics. My main focus is Stochastic Thermodynamics and Coarse-graining and the interplay of phase separation and chemical reactions in a biological context. The research topics I would primarily like to work on are non-linear dynamics, stochastic processes, information theory, soft condensed matter, and non-equilibrium thermodynamics.

PUBLICATIONS

Atul Tanaji Mohite, A. Goychuk and E. Frey, Mechanochemical co-operativity and pattern formation in two protein species (in preparation)
Atul Tanaji Mohite, Optimizing the Energetics of the Finite-time Driving of Field Theories (in preparation)

SCHOLASTIC ACHIEVEMENTS

IIT-Joint Entrance Examination 2012-13
Secured All India Rank 1474 in IIT-JEE 2012-13

Indian Physics Olympiad (IPhO)
Selected in the top 300 students in India, 2012-13

Middle-school Aptitude and Maths test, 2007-08
Awarded 17th rank in Maharashtra state of India with a percentile score of 99.99, 2007-08.

WORK EXPERIENCE

University of Luxembourg Doctoral researcher in the field of Theoretical Statistical Physics.	<i>Nov 2020 - Nov 2022</i>
Max Planck Institute for Neurobiology, Martiensried Contributed to a team of students for maintenance of SyConn. SyConn is aimed to automate synaptic connectivity inference for volume electron microscopy.	<i>Dec 2018 - Mar 2020</i>

SUMMER SCHOOLS

Physics of Life Summer School , Edinburgh: Poster	<i>Apr 2022</i>
Outstanding Challenges in Nonlinear Dynamics, Les Houches: Poster	<i>Mar 2022</i>
International Summer School FPSP XV, Brunneck: Poster	<i>Jul 2021</i>
The Beg Rohu Summer School, Quiborn: Poster	<i>Jun 2021</i>
Arnold Sommerfeld School - Physics of Life, LMU Munich	<i>Oct 2019</i>

CONFERENCES

Cell Physics, Saarbruecken	<i>Oct 2023</i>
Third Infinity conference, Goettingen: Talk	<i>Sept 2022</i>
DPG, Regensburg: Talk	<i>Sept 2022</i>
WOST III Workshop, Online: Poster	<i>May 2022</i>
Journees de Physique Statistique, Paris: Talk	<i>Jan 2022</i>
Inhomogeneous Random Systems, Paris	<i>Jan 2022</i>
WOST II Workshop, Online	<i>May 2021</i>
CeNS/CRC235 Workshop Evolving Nanosciences	<i>Sep 2019</i>
MECO44, Key Challenges in Statistical Physics, Kloster Seeon	<i>May 2019</i>

TEACHING EXPERIENCE

Saarland University Statistical Physics, Winter semester 2023	<i>Nov 2023 - Feb 2024</i>
University of Luxembourg Non-equilibrium soft and active matter, Summer semester 2022	<i>Feb 2022 - Jul 2022</i>
University of Luxembourg Calculation methods for Physics and Mathematics, Winter semester 2021	<i>Sep 2021 - Dec 2021</i>
Ludwig Maximilian University, Munich Calculation methods for Physics and Mathematics, Winter semester 2018	<i>Nov 2018 - Feb 2019</i>

INTERNSHIPS

Leiden University, Netherlands Implemented experimental setup for a tomography technique of NbN superconducting multiphoton detectors and analyzed data for it.	<i>May 2016 - Jul 2016</i>
TIFR-Mumbai Conducted experiments and examined polarization dependence of dielectric metastructures	<i>May 2015 - Jul 2015</i>

TECHNICAL SKILLS

Programming Languages	C++, Java, Python, OOP, HPC
Modeling and Analysis	COMSOL, Mathematica
Software & Tools	Latex

LANGUAGES

Marathi	Mother tongue
Hindi	Fluent
English	Fluent
German	Proficiency B1

EXTRA-CURRICULAR INVOLVEMENT

National Service Scheme-IIT Delhi, Volunteered for long term project NSS-Medicine Baba, Born-to-Blossom and Cloth & relief fund collection drives	<i>Jul 2013 - May 2017</i>
Part of IIT-Delhi Fine Arts & Crafts club	<i>Jul 2013 - May 2017</i>

HOBBY AND INTERESTS

As a hobby, I like to paint and sketch. I enjoy reading novels and poetry. I like to play strategy board games like Chess. I admire the works of Bhalachandra Nemade and Tukaram.