

2nd Women in Physics Career Symposium

Satellite event of the Joint Annual Meeting of SPS and ÖPG

4 September 2023, Universität Basel

Mentors

Below you will find a list of currently available mentors, who can be chosen by the mentees upon registration. The list will be updated continuously as soon as further mentors register.

Ana Akrap

I am an experimental condensed matter physicist, looking for signatures of relativistic-like physics in crystals through a study of topological materials. In my work I use light—from deep infrared to far ultraviolet—to understand the low energy properties of these topological materials. Currently I am an SNF Professor at the University of Fribourg, and I lead a group called "Light Fermion Spectroscopy".

I received my PhD from EPFL, and followed this with a postdoctoral stay at Brookhaven National Lab, USA. I then worked at the University of Geneva, first as an Excellence Fellow, and later with an Ambizione Fellowship. I love doing scientific outreach, and creating links to the broader audience. Having personally benefited from mentoring, I strongly believe in giving back to the physics community.



Mitali Banerjee

Mitali Banerjee received her Ph.D. degree from S. N. Bose National Centre for Basic Sciences, (Kolkata, 2012); Post-doctoral studies at the Indian Institute of Science (Bangalore, 2013); and the Weizmann Institute of Science (Israel, 2018), where she received the Institute Outstanding Postdoctoral Fellow Award (2018). Followed by a Research Associate at Columbia University (USA, 2019). She joined EPFL as an Assistant Professor at 2020, where she is studying quantum states of matter at low temperatures and high magnetic field. She received the Eccellenza grant from FNS in 2020 and the QuantERA consortium grant in 2022.



Lea Caminada

As an experimental particle physicist I explore the energy frontier by studying proton-proton collisions at the CERN Large Hadron Collider (LHC) with the CMS experiment. I am an SNF Eccellenza Professor at the Physics Institute of the University of Zurich and the group leader of the High-Energy Physics group of the Laboratory of Particle Physics at the Paul Scherrer Institute (PSI).

I obtained a PhD in physics from ETH Zürich in 2010 and then received an SNF fellowship for prospective researchers to work as a postdoctoral fellow (2010-2014) at the Lawrence Berkeley National Laboratory (LBNL), California USA. In 2014 I joined University of Zurich as a scientist and since 2016 I hold a joint position with PSI LTP. During my career I have been working on three high-energy physics experiments, ATLAS and CMS at CERN and H1 at DESY (Hamburg, DE). My research focuses on precision measurement of Standard Model processes including heavy quarks, gauge bosons or the Higgs boson. In order to observe these processes at the LHC, I am playing an active role in the design and construction of high-precision silicon pixel detectors, the innermost sensitive layers of the ATLAS and CMS detectors.

Besides my research activities I am engaged in University teaching and in outreach activities to share my excitement about particle physics with scholars, students and the general public.



Florenca Canelli

I'm a professor at the Physik-Institut of the University of Zurich. My research consists of studying the structure of matter, energy, space and time at the highest energies possible to understand the fundamental nature of our universe. My current research is the CMS experiment at the Large Hadron Collider at CERN.



Annapaola de Cosa

I am an experimental particle physicist who is exploring new Dark Matter scenarios at the energy frontier in a laboratory. I study proton-proton collisions at the CERN Large Hadron Collider (LHC), searching for signs of new particles and interactions that can explain Dark Matter. Currently, I am an SNSF Eccellenza Professor at ETH Zurich, where I lead a group of researchers searching for new physics with the Compact Muon Solenoid (CMS) experiment.

I received my PhD in Physics in 2013 at the University of Naples "Federico II", in Italy, and then I joined University of Zurich as a postdoc. In 2016 I received an SNSF Ambizione grant to carry out my own project. My research activities focus on exploring new physics scenarios, especially Dark Matter related ones, leading to unconventional signatures at colliders, including hadrons, leptons and missing momentum. I use machine learning techniques applied to the field of particle physics to enhance the sensitivity to very rare processes and develop novel tools for the exploration of challenging signatures of new physics.



Claire Donnelly

I am an experimental condensed matter physicist, specialising in three-dimensional systems, which I study with synchrotron X-rays. Specifically, I study how the three-dimensionality influences the physics of these systems – and how by we can design and control the properties by patterning at the nanoscale. Since September 2021, I have been leading my group [Spin3D](#) at the Max Planck Institute for Chemical Physics of Solids in Dresden.

I obtained my PhD at the Paul Scherrer Institute and ETH Zurich in 2017 for my work on X-ray imaging of 3D magnetic systems, which was recognised by a number of prizes including the APS Richard Greene Dissertation Award, the Werner Meyer-Ilse Memorial Award, the ETH Medal, and the SPS Award for Computational Physics. Following a one year postdoc at the ETH Zurich, I moved to the University of Cambridge and the Cavendish Laboratory as a Leverhulme Early Career Research Fellow to work on the dynamics of 3D magnetic nanostructures. During my time there, I was awarded the L'Oréal For Women In Science Fellowship, and the European Magnetism Association Young Scientist Award. Since September 2021 I am a Lise Meitner Group Leader at the Max Planck Institute for Chemical Physics of Solids in Dresden, Germany. Our group studies the behaviour of three-dimensional magnetic systems – both "bulk" and "nano" – making use of the experimental methods we have developed over the last few years.

As well as doing excellent science, I find it crucial that we enjoy what we do. As a result, I am keen to foster an open and welcoming atmosphere both in my group, and in our wider international collaborations.



Jamie Gloor

Professor Dr. Jamie Gloor has 15+ years of experience in psychology and management across 4 continents including Yale University and Technical University of Munich. After defending her dissertation at the University of Zurich (summa cum laude), she is currently a Swiss National Science Foundation PRIMA grantee at the University of St.Gallen. In the Competence Centre for Diversity & Inclusion at the HSG School of Management, she leads a team of 4 quantitatively exploring non-traditional paths for non-traditional leaders. Her research, writing, teaching, and consulting focus on leadership, gender & diversity, the future of work/leadership, and humor. She was honored with the 2022 HSG Latsis Prize and recently published in [Nature Human Behaviour](#).

For more information about Professor Gloor, her team, and her research, see www.jamiegloor.com ; connect on [ResearchGate](#), [Twitter](#), and [LinkedIn](#).



Nicole Hiller

I am a group leader at Paul Scherrer Institute (PSI) for the group SwissFEL Operation. While studying physics at the Karlsruhe Institute of Technology (KIT), I was introduced to particle accelerators and ended up doing both my master thesis, and afterwards my PhD at the electron storage ring ANKA (now KARA) at the KIT. I started my career working on longitudinal electron beam diagnostics. From the beginning on, I loved the interdisciplinary character of accelerator physics and enjoyed the collegial and welcoming atmosphere in the accelerator community world-wide. When PSI was starting the commissioning of the Swiss free-electron laser (SwissFEL) in 2016, I took the opportunity to join the team there. Since then, my focus has shifted more towards the operational aspects & optimisation of particle accelerators and I became a group leader three years ago which brought along many new, interesting challenges.



Zoë Holmes

Zoë Holmes obtained her master's degree in Physics and Philosophy at the University of Oxford in 2015. During her PhD at Imperial College London she worked on quantum thermodynamics, receiving her degree in February 2020. After completing a temporary research position at Exeter university, she joined Los Alamos National Lab (LANL) as a post-doctoral researcher working on near-term quantum algorithms. In May 2021 she was awarded the Mark Kac post-doctoral fellowship to continue her work at LANL. Since August 2022, she has been a tenure track Assistant Professor of Physics in the School of Basic Sciences at the EPFL, where she founded the Laboratory of Quantum Information and Computation. Her current research focuses on the foundations of quantum machine learning and developing new approaches to quantum simulation.



Marc Janoschek

I am an experimentalist who uses large-scale research facilities to explore the fascinating properties of quantum matter using neutron, muon, and photon probes. During my master and PhD work at the Technische Universität München, I held appointments at three European neutron sources (Institute Laue Langevin, Paul Scherrer Institute, and Heinz-Maier-Leibnitz Zentrum), where I developed novel instrumentation. After postdoctoral appointments at the Universität zu Köln and University of California, San Diego, I became a scientific staff member at Los Alamos National Laboratory, where I led the neutron scattering efforts of the Condensed Matter & Magnet Science group. Since 2018 I am the head of the Laboratory for Neutron and Muon Instrumentation (LIN) at the Paul Scherrer Institute, and since 2021 also a professor of experimental physics at the University of Zurich. Large-scale facility experiments require collaborating in large and diverse teams, which I enjoy immensely.

Besides my research and teaching, I also enjoy engaging in community and outreach efforts. For example, I am the president of the Swiss Neutron Science Society, am carried out workshops for the Kinderuniversität Zürich, and have experience as a mentor across several career levels starting from students up to leadership positions. Finally, I have also initiated and organized the Women in Physics Career Symposium.



Christine Klausner

I am an experimental physicist who specializes in neutron instrumentation, in particular optics. After my physics studies at EPFL and University of Waterloo, I obtained a PHD from Technical University of Vienna in the field of high precision particle physics studying neutron decay. My passion for instrumentation led me to join PSI as a PostDoc in 2015 in the group of neutron optics. In 2018, I have become tenure-track staff leading a small team that operates the sputtering lab of PSI/LIN. My research interests are the development of advanced neutron optical devices. Here, I focus on two main areas, namely using neutron optical devices to improve signal-to-noise on neutron instruments and designing new polarizing optics that will allow a widespread use of polarization analysis. These are key developments for allowing experiments that are not feasible to date. I particularly enjoy that my work requires the skillsets of both a physicist and an engineer.



Marianne Liebi

Marianne Liebi is Tenure-Track Assistant Professor at EPF Lausanne and group leader at PSI. She has been appointed in 2021 at EPFL where she is part of the Institute of Materials within the School of Engineering. Marianne Liebi studied Food Science at ETH Zurich where she also obtained her PhD in 2013. As a Postdoc in the coherent X-ray scattering group at the Swiss Light Source she worked from 2013-2016 on method development in SAXS tensor tomography. In 2016 she moved to Sweden where after a short period at the NanoMAX beamline, MAXIV Laboratory, Lund she started her own research group in 2017 as Assistant Professor at the Chalmers University of Technology, Gothenburg, and became Docent in Physics in spring 2020. She kept her affiliation at Chalmers University of Technology, where still part of her group is located when moving back to Switzerland in 2020 where she was Scientific Group Leader in the Center for X-ray Analytics at Empa, St.Gallen, before joining PSI in November 2021. The focus of Marianne Liebi's research is in the development of advanced X-ray imaging techniques and their application towards materials with hierarchical structures. For more details on the research see www.psi.ch/smam. Creating a collaborative and supportive atmosphere within her research group and keeping the fun of exploring alive is thereby an important goal.



Hubertus Luetkens

I am a senior research scientist working in the Laboratory for Muon-Spin Spectroscopy (LMU) within the Research with Neutrons and Muons Division (NUM) at the Paul Scherrer Institute (PSI). I obtained my PhD in experimental physics from the Technical University of Braunschweig, Germany in 2003. Since then I have been working in different positions in the LMU. In 2016, I became leader of the Bulk- μ SR group which includes senior scientists, postdocs, PhDs and one technician. I am responsible for the scientific, technical and financial management of the bulk μ SR user facility at the Swiss Muon Source (μ S) with five μ SR instruments on four separate beamlines. Since 2021, I am a member of the PSI Research Committee (FoKo).

In all my years at PSI, I have been conducting independent research on a broad spectrum of topical questions of contemporary condensed matter physics with the emphasis on magnetism and superconductivity in thin films, magnetic heterostructures and bulk specimens. The principle method of investigation in most of my studies has been muon spin rotation or relaxation, very often complemented besides standard sample characterization by e.g. different neutron scattering techniques, ARPES, Mössbauer spectroscopy or nuclear magnetic resonance.



Viviane Lütz-Bueno

I focus my working time on small-angle scattering (SAS) techniques, with a particular focus on characterizing the structure of soft matter systems. During my exchanges between ETH (PhD and Senior Assistant experience) and PSI (postdoc and tenure-track scientist), I have acquired expertise in performing and interpreting standard, as well as developing novel methodologies for *in situ* SAS measurements, such as the structural mapping of fluids under flow. My research interests span a broad spectrum, ranging from hierarchical biomaterials to self-assembled systems and alternative routes for biopolymers to material characterization. Currently, I am co-responsible for the commissioning and user program of a new SANS-LLB instrument, which is shared among LLB (Saclay, France), and SINQ/PSI. Finally, I supervise two PhD students, working on *in situ* SANS method development.

Out of working ours, you can find me focusing on my family, two kids and many friends. I prioritize the best life-balance possible in my trajectory, and so far, I am very satisfied with my choices. My goal in engaging in this platform is to support other scientists struggling with these aspects, and help finding the light at the end of the tunnel, which sometimes might seems too darkened.



Angela Papa

coming soon

Helena Pleinert

I am the CEO of Pleinert & Partner, a consultancy focussing on innovative human capital management and organizational design, operating internationally with teams located online and physically mainly in Switzerland and Finland. We also cultivate cooperations with several academic institutions. I focus on projects in the area of innovative methods in people strategy and new forms of work, especially work in the context of the upcoming metaverse technologies. My company's website can be found here: www.pleinertpartner.com

Prior to founding Pleinert & Partner, I worked in asset management as a member of the management of an investment boutique that specialized in technology investments where I started out as a quantitative analyst. Prior to that, I worked at Paul Scherrer Institut as a project leader at SINQ and as a PhD candidate. My research was in the area of quantitative measurements of moisture distributions in porous materials with neutron radiography.

And why did I not stay in Physics? Even as a child organizational design was fascinating to me, although I didn't know that it is called that, and I kept asking my parents how things were organized at work. When I was a teenager, I was told that Physics is an excellent generalist foundation for a career in business. This is why I chose Physics for my studies and I don't regret it!



Ekaterina Pomjakushina

I am a chemist and my scientific interests lay in the field of solid state chemistry and topics, which are at the moment in the focus of solid state physics. I am an expert in crystal growth and materials engineering of compounds with novel electronic properties. I have graduated from the Moscow D. I. Mendeleev Institute of Chemical Technology, Russia in 1988, and have been working for many years as a research scientist at the Joint Institute for Nuclear Research, Dubna, Russia. I have obtained my PhD in 1996 at the same university I was graduated for. In 2002, our family has moved from Russia to Switzerland, because my husband (physicist) has got an instrument scientist position at the Laboratory for Neutron Scattering (LNS) PSI. Since 2003 I have been working as a research scientist in the Group of Material Synthesis at PSI. In 2017, I became a leader of the Solid State Chemistry Group at the Laboratory for Multiscale Materials Experiments PSI.



Heidi Potts

I am an experimental physicist working at Zurich Instruments, a test and measurement company that makes cutting-edge instrumentation including lock-in amplifiers and quantum control systems. During my Bachelor and Master studies in Nanoscience at the University of Basel, I became excited about the properties of nanoscale devices and decided to pursue a PhD on semiconducting nanostructures at EPFL. I then continued my research with an SNFS Early PostDoc Mobility Fellowship at Lund University in Sweden, where I investigated spin states of coupled quantum dots. While I very much enjoyed the challenges of fundamental research, I also wanted to experience the work environment of the private sector and so joined Zurich Instruments in 2021. As an application scientist, I support researchers working in a variety of fields with their measurement challenges; I am excited to learn about different experiments every day, and I enjoy meeting researchers with different backgrounds. In my free time, I like to be outdoors and spend time with my family.



Daniela Rupp

I am 39 years old, tenure track assistant professor in physics at ETH Zürich and mother of a 12 year old daughter. I studied Physics in Augsburg, Berlin, and Sevilla and did my doctorate at the Technical University of Berlin. In 2017 I became a Leibniz junior research group leader at the Max-Born-Institute in Berlin. Since end of 2019 I am heading the Nanostructures and Ultrafast X-ray Science group at ETH Zürich.

I am an experimental physicist interested in the structure and dynamics of nanoscale matter, in particular when excited to highly non-equilibrium states. In our experiments we investigate short-lived nanostructures such as atomic clusters, tiny aerosols, or liquid nanodroplets and aim to resolve ultrafast changes of their electronic and structural properties under laser excitation. One of the most important methods is single particle coherent diffraction imaging (CDI), which combines extreme spatial and temporal resolution. This method has become possible with X-ray free-electron lasers such as the SwissFEL at PSI and high-intensity laser-based high-harmonic sources. They provide very intense and extremely short X-ray pulses, which let us take snapshot images and "movies" of the free-standing nanostructures within a single laser shot.



Yasmine Sassa

Yasmine Sassa conducted her Bachelor and Master studies in physics at the Université Pierre et Marie Curie (Paris VI) and Ecole Supérieure de Physique et Chimie Industrielles (ESPCI) in France. She moved to Switzerland in 2006 to complete her Master at the Paul Scherrer Institute (PSI) and then continued as a Ph.D. student at both PSI and University of Neuchâtel. Her Ph.D. subject was about the elaboration and characterisation of cuprate superconductors thin films by angle-resolved photoelectron spectroscopy (ARPES). After her Ph.D., she did first a postdoc at ETH Zürich and then moved to Uppsala University (Sweden) after obtaining a Swedish grant from the Wenner-Gren Foundation in 2014. Since 2019, Yasmine Sassa is holding an Assistant Professor position at the Department of Physics in Chalmers University of Technology (Sweden). She is leading the Quantum Materials & Technologies (QuTM) group at the Materials Physics Division at Chalmers. Her research is oriented towards advanced characterization of a wide scope of materials ranging from correlated electron systems (e.g., superconductors) to quantum materials for energy efficient electronics/spintronics (e.g., silicene, skyrmions). Her research group is using the abilities of large-scale facilities by performing X-ray, neutron scattering and muon spin rotation techniques to tackle scientific questions.



Philip Schmidt Wellenburg

My principal scientific interest is testing fundamental concepts of matter and interactions using methods and technics of low energy high precision particle physics. After my diploma in physics at the Technische Universität München, I moved to Grenoble, France for my PhD thesis. There I also met my wife sharing the same interest in climbing and hiking. Together we have three children, the first born in France, the two others in Switzerland.

After my defense, I was hired on a tenure track position at the Paul Scherrer Institute (PSI) for the search for the neutron electric dipole moment. This project permitted me to develop my scientific and social capacities by engaging and leading the international collaboration and fostering young students and post-docs during their early careers.

Outside science, I always was engaged in projects supporting the development of young people. During university, I worked as a volunteer youth guide for the German alpine club and funded with friends the NGO "Commit to partnership" to foster exchange between German students and societies of the global south. Today, I am committed to pushing for equal opportunities and fair participation as a member of the municipal council of my village.



Jennifer Schober

Jennifer Schober is a theoretical astrophysicist and is currently leading a research group at the École Polytechnique Fédérale de Lausanne (EPFL). She has obtained her PhD from Heidelberg University (Germany) in 2014 and then became a postdoctoral fellow at the "Nordic Institute for Theoretical Physics" (Nordita) in Stockholm (Sweden). In 2017, she relocated to Lausanne (Switzerland) where she joined the "Laboratory of Astrophysics" at EPFL with a Marie Curie COFUND fellowship. In 2019, she was awarded an SNSF PRIMA grant that allowed her to build up her own research group.

In her highly interdisciplinary research, she explores fundamental questions of cosmology and astrophysical fluid dynamics. She is an expert on magnetohydrodynamical turbulence which is a universal property of astrophysical systems, from small cosmic scales like stars to galaxies, and up to galaxy clusters. To understand the complex interaction between turbulence and cosmic magnetic fields, she constructs theoretical models and performs numerical simulations on supercomputers. Another essential part of her work is to derive observational signatures of astrophysical turbulence that can be tested with radio telescopes. The ultimate goal of the research conducted by Jennifer Schober and her team is to understand the dynamics of astrophysical flows and, in particular, how magnetohydrodynamical turbulence affects the evolution of the Universe.



Anna Sfyrla

Anna Sfyrla is a high energy physicist and associate professor at the University of Geneva. She works at the ATLAS and LHC experiments of the CERN LHC and searches for physics beyond the Standard Model. Besides her research, she is engaged in actions related to education, outreach and promotion of equal opportunities in academia.



Kent Shirer

I am an experimental condensed matter physicist currently working at Zurich Instruments, a company that builds cutting-edge instrumentation including lock-in amplifiers and quantum computing control systems. My interest in physics began early: growing up, my friends and I built cosmic ray detectors on the roof of our high school in Lincoln, Nebraska. During my undergraduate studies at Northwestern, I discovered the world of ultra-low temperature physics, growing aerogels to use in experiments on superfluid ^3He . I did my PhD at the University of California, Davis and postdocs at the Max Planck Institute for Chemical Physics of Solids and EPFL, where I researched superconducting and strongly correlated materials using techniques varying from NMR to high field electronic transport. During my research, I grew increasingly interested in quantum computing, and so I joined Zurich Instruments as an Application Scientist for Quantum Technologies; I enjoy being a part of a talented team that develops control electronics and software for quantum computing, helping researchers push their experiments forward, and the fast progress towards a quantum future.



Chiara Sinito

I obtained my PhD in Physics at the University of Bordeaux, where I studied the optical properties of single colloidal semiconductor nanocrystals by magneto photoluminescence spectroscopy.

As a post-doctoral researcher at the University of Versailles and at the Paul-Drude-Institut in Berlin, I investigated the optical properties of semiconductor nanostructures (colloidal nanocrystals, planar and nanowire heterostructures) for the realization of hybrid photovoltaic cells and advanced light-emitting devices. Afterwards, I worked as an application engineer at the Swiss company Attolight AG. There, I applied cathodoluminescence techniques to the failure analysis of semiconductor-based devices for industrial customers.

Today, I lead the automated visual inspection team at the Swiss company Wilco AG, a machine builder specialized in quality control for the pharmaceutical industry. At Wilco AG, I actively contribute to the improvement of the manufacturing processes of our customers and bring technological innovation into the pharmaceutical environment.



Anna Soter

I am an experimental particle physicist, and since 2021 a tenure-track assistant professor leading the Fundamental Interactions Group at ETH Zurich.

My research area focuses on precision particle physics using exotic atoms and antimatter. Which means I investigate particles - antiprotons, pions and muons - trapped in atomic systems or in electromagnetic fields, and investigate their properties with methods from precision physics (laser spectroscopy, atom interferometry, ion traps). This research addresses several unanswered questions in physics, like the baryon asymmetry (lack of antimatter) in the Universe, or the possible flavour anomalies, and provides experimental tests of the connection between gravity and quantum field theories.



Anne Verhamme

Anne Verhamme obtained her PhD in June 2008 at the University of Geneva. She is an expert of radiation transfer effects in galaxies, more precisely the resonant Lyman-alpha line of Hydrogen, the most efficient tool to detect distant galaxies. She is working at the interface between simulations and observations of galaxy formation and evolution. She was awarded a starting grant from the ERC (European Research Council) and a professorship from the SNF (Swiss National Foundation) to test indirect diagnostics for the escape of ionizing radiation from galaxies, and to unveil the nature of the sources of Cosmic Reionization. She is involved in many international collaborations: RASCAS (RADiation SCAtterings in Simulations), LARS (Lyman Alpha Reference Sample), and the MUSE (Multi Unit Spectrograph Explorer) GTO (Guaranteed Time Observations) consortium in particular.

