
ATTO
8TH INTERNATIONAL CONFERENCE ON ATTOSECOND SCIENCE AND TECHNOLOGY
POSTDOC OPENINGS AND CANDIDATES
July 11 update
JULY 11-15, 2022
ORLANDO, FLORIDA
U.S.A.
UCF

ATTO VIII: Postdoctoral Openings

Matthias Kling, SLAC / Stanford University **Start time:** 10/1/22 - 10/1/25
Research: Ultrafast X-ray Science in the fields of AMO physics, Chemistry, Biology, Material Science, Laser Science.
What we look for and offer: We are constantly looking for motivated postdoctoral researchers or research associates that have a passion for ultrafast science and like to join our team.

Mike Chini, University of Central Florida APPLY HERE **Start time:** 6/6/22 - 7/15/23
Research: Strong-field physics and attosecond science in solids and gases.
What we look for and offer: (1) Attosecond Optoelectronics in Conventional and Quantum Insulators, (2) Attosecond Interferometry of Gas-Phase Atomic and Molecular Dynamics.

Bernd Schütte, Max-Born-Institut **Start time:** 7/1/22 - 10/1/22
Research: We develop and apply attosecond-pump attosecond-probe spectroscopy. To this end, we have developed two unique setups based on (1) loose-focusing of the driving laser and (2) out-of-focus HHG in a very compact geometry. We perform experiments both in the gas phase and in the condensed phase.
What we look for and offer: We are preferentially looking for a postdoc with a background in using HHG in combination with solid-state samples, e.g. using transient absorption spectroscopy.

Thomas Pfeifer, Max-Planck Institut für Kernphysik **Start time:** 7/1/22 - 7/1/22
Research: Quantum Dynamics in Intense Laser Fields, from Atto to Seconds, and Beyond ...
What we look for and offer: Curiosity for new physics mechanisms and technology around lasers and their control, with the opportunity to form and lead a new group if desired.

Stephen Leone, University of California Berkeley **Start time:** 3/1/23 – 9/1/23
Research: Attosecond transient absorption, gas phase and solid state, attosecond four wave mixing
What we look for and offer: One position in attosecond four wave mixing jointly with Dan Neumark, other possible positions in gas phase and solid state.

Jan Marcus Dahlström, Lund University **Start time:** 10/1/22 – 1/1/23
Research: Theoretical Light Matter Dynamics In Attosecond Science
What we look for and offer: Relativistic attosecond dynamics in atoms using the time-dependent Dirac equation.

Francesca Calegari, Deutsches Elektronen-Synchrotron/Universität Hamburg, **Start time:** 11/1/22 – 5/1/23
Research: Electron dynamics in bio-relavant molecules, clusters and nanosystems.
What we look for and offer: Commissioning and operating an attosecond beamline combining attosecond soft-x ray pulses and few-femtosecond UV pulses for molecular spectroscopy.

Vyacheslav Leshchenko; Robert Baker; Louis DiMauro, The Ohio State University **Start time:** 8/1/22 – 5/1/23
Research: XUV Transient Absorption and Reflection Spectroscopy of gas, solid, and liquid samples; fundamental Strong Field Physics; Spatio-Temporal Molecular Imaging; Attosecond Charge Migration.
What we look for and offer: Several openings for postdoctoral associates in experimental attosecond physics are available at The Ohio State University

Mohammed Hassan, University of Arizona **Start time:** 8/1/22 - 12/31/22
Research: The aim of our research is to see the invisible in 4D. We are developing ultrahigh temporal resolution electron microscopy in order to record movies of molecular and atomic dynamics. Moreover, we are working on generating isolated attosecond electron pulses to attain attosecond temporal resolution in electron microscopy, or "Attomicroscopy", with the ultimate goal of imaging the electron motion in action.
What we look for and offer: If you are a motivated postdoc scholar who has experience in Ultrafast laser, electron microscopy (TEM, STM, AFM) & diffraction and would like to do a high-risk high-reward science, please contact me, I have multiple open positions in my group.

Oren Cohen, Technion, Israel institute of Technology **Start time:** 9/1/22 – 12/31/23
Research: Experimental and theoretical investigations of: Quantum aspects in HHG (e.g. HHG driven by quantum light), Generation & application of circularly-polarized high-order harmonics, Selection rules and dynamical symmetry breaking spectroscopy in (high) harmonic generation, ultrahigh speed imaging.
What we look for and offer: Ongoing projects with openings for post-docs include (but are not limited to): HHG driven by quantum light and HHG with ultra-sensitivity to chirality.

Kathryn Hamilton (on behalf of **Klaus Bartschat**), Drake University **Start time:** 6/9/22 – 12/31/22
Research: All aspects of time-dependent light-matter interaction from few-photon to strong field. Recent projects include variations of the RABBITT technique, High-Harmonic Generation, and Frustrated Tunnel Ionization. We use various methods to solve the TDSE, including a SAE approach, and the all-electron R-Matrix with Time-dependence method. We also study time-independent electron and photon collisions with atoms and ions using the B-Spline atomic R-Matrix code.
What we look for and offer: We have an ongoing advertisement for a postdoctoral research position, with the possibility of hiring a second candidate at a later date. A significant part of the workload will also be allocated to calculations for photon and electron collisions with complex atoms and ions. Particular emphasis will be placed on benchmark calculations of data relevant for plasma applications and the treatment of time-dependent, short-pulse, intense-laser processes using both the single-active electron (SAE) approximation and the general multi-electron R-matrix with time-dependence (RMT) approach, including the use of input generated by the BSR code. Working with massively parallel computing architectures will be a substantial part of the work. The candidate's duties will also include maintaining and updating the BSR code and its AMOS Gateway interface, and so excellent written and oral communication skills in English are required.

Romain Geneaux, CEA Saclay **Start time:** 01/03/23 – 01/03/25
Research: We develop and conduct various types of attosecond spectroscopy in condensed matter on two beamlines; one for all-optical approaches (transient absorption, reflectivity, magnetic circular dichroism, magnetic helical dichroism), and another for charged particle measurements (angular-, time- and spin-resolved photoemission).
What we look for and offer: We are looking for candidates with expertise in time-resolved spectroscopy. We will equally consider candidates with a solid-state physics background looking to acquire knowledge in attoscience, or vice-versa. Potentially open positions will be funded by a recently awarded ERC Starting Grant. The topic is the development of spectroscopies of spin properties using the angular momentum of light (both spin and orbital), with attosecond resolution. We aim to investigate coherent interactions between the field of light and spin-polarized systems (either homogeneous systems like ferromagnets, or structured ones like magnetic vortices and nanoparticles with plasmonic properties). We are open to discussing other research directions with candidates, even if they fall slightly out of the scope of this specific project. We are also quite flexible in terms of potential hiring dates - do not hesitate to come discuss opportunities not in the immediate future.

Zsolt Diveki, ELI ALPS, **Start time:** 7/1/22 – 12/31/22
Research: The SYLOS GHHG Attosources Group of ELI-ALPS maintains two gas-based high harmonic generation beamlines (COMPACT and LONG) driven by the two-cycle, 1 kHz, TW-class SYLOS laser. Both beamlines are in the phase of commissioning and are expected to enter user operation early 2022. The beamlines are dedicated to the study of nonlinear XUV processes by the XUV-XUV pump-probe technique with attosecond time resolution, which has so far been achieved only in a few laboratories worldwide. Furthermore, the LONG beamline has the ability to combine two additional pulses in the UV-IR range for the preparation of specific sample states. In addition to comprehensive diagnostics, the scientific equipment includes various time-of-flight spectrometers, a cold particle source and an ion microscope, and will soon be joined by a reaction microscope (ReMi or COLTRIMS) to enable the study of multi-photon many-body processes. The activities are conducted in strong collaboration with Lund University and FORTH IESL.
What we look for and offer: We are looking for an enthusiastic and skilled researcher with expertise in high harmonic generation (HHG), attosecond physics, and atomic, molecular and optical (AMO) physics (or closely related disciplines) to participate in various projects managed by the SYLOS GHHG Attosources Group of ELI-ALPS. In addition to the operation and application of a beamline for in-house projects, the candidate will provide strong support to ensure the success of cutting edge user campaigns.

Stefan Haessler, Laboratoire d'Optique Appliquée (LOA), CNRS ✉ 🌐 **Start time:** 9/1/23 - 9/1/24
Research: We generate attosecond pulses on plasma mirrors, driven in the relativistic regime by terawatt few-cycle pulses. Our current project is to develop a suitable optical setup to refocus these attosecond pulses into a photo-ion detector (such as an adapted VMI), and demonstrate record-high on-target intensities achieved with sub-femtosecond pulses. We're currently applying for 24 months postdoc funding and we will support the candidate in applying for personal scholarships from Ecole Polytechnique or the EU.
What we look for and offer: The ideal candidate for the position has a PhD in optics or ultrafast physics, and a keen interest in doing high-profile experimental research. Applicants with strong experience in experimental ultrafast and nonlinear optics, photoelectron/ion spectroscopy, and nonlinear XUV physics will be preferred.

Balazs Major, ELI ALPS ✉ 🌐 **Start time:** 7/1/22 – 12/31/22
Research: The HR Attosources Group of ELI ALPS is responsible for two gas-based high-harmonic generation beamlines (HR GHHG Gas and HR GHHG Condensed) driven by the 100 kHz high average-power HR laser of ELI ALPS. The HR GHHG Gas beamline, which is designed for extreme ultraviolet ,Äì infrared (XUV-IR) pump-probe studies in gas phase and has been in use since June 2019 [1], is under continuous upgrade and has been user-ready since the beginning of 2021 [2]. The HR GHHG Condensed beamline, equipped with a time-delay compensated XUV monochromator for experiments with liquid and solid phase samples, has been producing attosecond pulse trains since June 2020, and its commissioning was finished at the end of 2021. The development of the beamlines to extend their capabilities is a permanent task of the HR Attosources Group [3]. The group is also responsible for a Velocity Map Imaging (VMI) end-station (available since November 2020), and soon the HR GHHG Gas beamline will be equipped with a Reaction Microscope (ReMi or COLTRIMS). Further end-stations and detectors are planned to be installed and will be accessible for research as well as for projects initiated by the group [3,4].
What we look for and offer: We are looking for an enthusiastic and skilled researcher with expertise in high-harmonic generation (HHG)/attosecond physics/atomic, molecular and optical (AMO) physics (or closely related disciplines) to participate in various projects managed by the HR Attosources Group of ELI ALPS. In addition to contributing to designing, building and commissioning various pieces of equipment, the candidate is also expected to take part in user support during the use of beamlines and end-stations in this permanent position.

Adam Borzsonyi, ELI-ALPS ✉ 🌐 **Start time:** 7/7/22 – 12/31/22
Research: Here at ELI-ALPS (https://www.eli-alps.hu/) we offer beamtime for external research applications which require state-of-the-art attosecond and femtosecond pulsed laser technologies. Our main goal is to provide the shortest possible light pulses at the highest available average power for the scientific community. The Laser Sources Division is responsible for the operation of all laser systems in order to drive the attosencond beamlines, end-stations and individual user experiments with the requested beam parameters, including pulse energy, beamsize, polarization state, pulse duration, CEP etc. specified for a given research project. Other scientific activities within the Laser Sources Division include research towards further pulse shortening via post-compression techniques at all available wavelengths at ELI-ALPS, laser pulse metrology developments at high repetition rates and average powers, and advancement in new sources (UV, VIS, far IR) with few-cycle durations and CEP stability.
What we look for and offer: An enthusiastic and skilled researcher with expertise in high energy or high average power ultrafast laser physics, preferably experienced in solid-state, fibre and/or optical parametric amplifier development, ultrafast pulse characterization and/or post-compression techniques. The successful candidate will work as part of the laser team in an international and interdisciplinary scientific environment by supporting various research projects of external user groups on ELI-ALPS beamlines; while also leading or participating in internal R&D activities. The successful candidate must hold a PhD in physics, laser engineering, optics, photonics or other related scientific field. Applications of candidates on track to complete their PhD are also considered. Candidates with 5+ years of experience in the field of laser physics and/or laser engineering together with a demonstrated record in research will be considered too. Required skills and abilities: the successful candidate must be able to work as part of a scientific support team, but also have the ability to handle tasks independently in the laboratory, broad practical knowledge of high-power, ultrafast pulse generation, amplification, propagation and manipulation, experience with ultrafast pulse characterization methods, good written and oral communication skills in English.

Andrea Trabattoni, CFEL & DESY, Hamburg, Germany **Start time:** 1/1/23 – 6/30/23
Research: Within the Attosecond group, the team PhotoElement investigates the photo-induced electron dynamics involved in low-energy nuclear transitions. To this purpose, we develop innovative VUV laser sources and spectroscopical tools to track in realtime this particular family of electronic motion.
What we look for and offer: We look for a postdoctoral researcher with expertise in UV/XUV laser science and atomic/molecular spectroscopy. Their research should be focused on the time-resolved spectroscopy of internal-conversion electron dynamics occurring in nuclear transitions.

L'Huillier, Arnold, Eng-Johnsson, Mauritsson, Lund University, Sweden **Start time:** 09/01/22 – 01/01/23
Research: At the Lund Attosecond Science Center (LASC), research is performed on the generation and application of extremely short light pulses, in the attosecond and extreme ultraviolet range. The activities span from the development of ultrafast laser technology to extreme nonlinear optics and studies of the electron dynamics in atoms and molecules as well as more complex systems using attosecond light pulses. Ultrafast laser technology, including the development of CEP-stable, few-cycle pulses and of characterization techniques is also part of our research.
What we look for and offer: We propose three different projects:
1. In collaboration with a world-leading industrial partner, a high repetition rate attosecond pulse source based on an industrial ytterbium femtosecond laser is developed with the goal to optimize the conversion efficiency as well as to tailor the spatial coherence properties to industrial applications, such as semiconductor structure metrology. The candidate will be part of a small research team, including PhD students, and is expected to take a coordinating role within the team.
2. The proposed project concerns time-resolved studies of atoms, molecules and solids using intense ultrashort laser pulses in the extreme ultraviolet and X-ray spectral regions as well as ultrashort, laser-generated, electron pulses. The project includes development, optimization and characterization of a laser-driven source for the generation of attosecond pulses, development and implementation of XUV-XUV pump-probe techniques as well as experiments at international free electron laser facilities.
3. This project aims at further developing a technique to study coherence in atomic systems using an extended version of transient absorption. Combining transient absorption with opto-optical modulation enables the measurement of both absorption and re-emission simultaneously and thus probe the different coherence times of the ensemble more accurately. The project is mainly experimental work to further develop the technique in close collaboration with theory collaborators.

Robert Jones, University of Virginia, USA **Start time:** 08/01/22 – 01/01/24
Research: Quantum control, atoms and molecules in strong fields, electronic correlation and ultrafast dynamics.
What we look for and offer: We are looking for a highly motivated postdoc, preferably with experimental expertise related to short-pulse/high-intensity lasers and high harmonic/attosecond pulse generation, to join a multi-institutional collaborative team investigating electron dynamics in molecules on femto and attosecond time-scales.

Wendell T. Hill, III; Zenghu Chang, University of Maryland; UCF, USA **Start time:** 09/01/22 – 09/01/23
Research: This collaborative project between the University of Maryland and the University of Central Florida explore attosecond dynamics in gas-phase polyatomic molecules probed with water window X-rays (280 - 530 eV) via attosecond transient absorption spectroscopy (ATAS) of the K-edges of carbon, nitrogen and oxygen.
What we look for and offer: We have an opening for one candidate with experience in attosecond technology and interest in ultrafast dynamics associated with charge migration leading to structural changes such as isomerization.

ATTO VIII: Postdoctoral Candidates

Abdallah AlShafey, The Ohio State University. ET
PhD Defense: 4/1/23; **Can Start**: 4/1/23; **At ATTO VIII**: Highlighted Poster M64
Interests: Theoretical condensed matter, specifically interested in the nonlinear response and HHG produced in exotic matter, including strongly correlated and topological matter.
Areas: North America; Europe; North Africa; Western Asia.

Hugo Laurell, Lund University. ET
PhD Defense: 9/1/23; **Can Start**: 9/1/23; **At ATTO VIII**: Poster M16
Interests: Photoionization dynamics, quantum information, photoelectron interferometry, terahertz time-domain spectroscopy, plasmonics.
Areas: North America; Europe.

David Busto, University of Freiburg / Lund University. E
PhD Defense: 8/28/20; **Can Start**: 1/1/24; **At ATTO VIII**: Posters M11, M16, M20, T07
Interests: Photoionization dynamics, photoelectron interferometry, entanglement and decoherence.
Areas: North America; Europe; Antarctica.

Angana Mondal, ETH Zurich. E
PhD Defense: 5/10/20; **Can Start**: 6/7/24; **At ATTO VIII**: Poster T63
Interests: High harmonic spectroscopy. Chiral discrimination and control. Attosecond XUV source development and characterization. Pump-probe studies of ultrafast transient mechanisms. HHG from plasma sources.
Areas: North America; Europe.

Debobrata Rajak, CNRS-Weizmann Institute of Science. E
PhD Defense: 1/7/23; **Can Start**: 3/7/23; **At ATTO VIII**: Talk in session M2
Interests: I have always been interested in working in atto-second science. I am actively looking for positions in Atomic-Molecular Physics using X-FEL.
Areas: North America; Europe.

Farshad Shobeiry, Max Planck Institute for nuclear physics. E
PhD Defense: 2/2/21; **Can Start**: 10/1/22; **At ATTO VIII**: Talk in session F1
Interests: Laser, Optics.
Areas: North America; Europe.

Patrick Rupprecht, Max Planck Institute for Nuclear Physics. E
PhD Defense: 6/8/22; **Can Start**: 10/1/22; **At ATTO VIII**: Talk in session R1
Interests: atto- to femtosecond dynamics within molecules; core-level transient absorption spectroscopy; HHG from VUV to water-window x-rays; (SWIR) few-cycle pulse generation and characterization.
Areas: North America; Europe; Oceania.

Danylo Matselyukh, ETH Zurich. E
PhD Defense: 10/1/22; **Can Start**: 1/15/23; **At ATTO VIII**: Talk in session R1 and Poster R02
Interests: Attochemistry, non-adiabaitc dynamics, possible interested in transitioning from gas phase into solid-state experiments.
Areas: Europe; East Asia; South-Eastern Asia; Antarctica.

Roland E. Mainz, CFEL at DESY, Hamburg, Germany. E
PhD Defense: 7/9/19; **Can Start**: 1/1/23; **At ATTO VIII**: Talk in session R2
Interests: Waveform Synthesis, Attosecond Science, Timing Synchronization, High-Speed Electronics.
Areas: North America; Europe; East Asia; Antarctica.

Robin Weissenbilder, Lund University.
PhD Defense: 6/13/23; **Can Start**: 8/1/23; **At ATTO VIII**: Poster M19
Interests: high order harmonic generation, photoionization dynamics.
Areas: North America; Europe; East Asia.

Omer Kneller, Weizmann Institute.
PhD Defense: 12/1/23; **Can Start**: 1/1/24; **At ATTO VIII**: Talk in session R1
Interests: So far, I have been mainly working on attosecond all-optical interferometry, performed at XUV wavelength. So far, we have applied this scheme to resolve atomic photoionization delays, the interaction of a tunneling electron with a non-adiabatic tunneling barrier, and its influence on the tunneling phase. It also provides a method of XUV polarization control, achieving an attosecond lock-in detection scheme for circular dichroism. I am also involved in a collaboration to study ultrafast chirality with the Bordeaux group. I do not have a specific direction in mind for a post-doc currently, as my PhD defense is still about 1.5 years away. Still, I would love to interact and discuss potential ideas and open opportunities that could fit this timeline.
Areas: North America; Europe.

Yang Hwan Kim, Institute for Basic Science.
PhD Defense: 11/17/21; **Can Start**: 9/1/23; **At ATTO VIII**: Poster T38
Interests: laser experiments using liquid target, laser-plasma interaction, extreme ultraviolet spectroscopy, high-order harmonic generation using gas jet, laser pulse characterization, photoelectron spectroscopy.
Areas: North America, Europe, North Africa, Western Asia, East Asia, Northern Asia, South-Eastern Asia, Southern Asia, Oceania, Antarctica.

Viacheslav Korolev, Friedrich-Schiller University Jena, Institute of Optics and Quantum Electronics.
PhD Defense: 09/01/22; **Can Start**: 09/01/22; **At ATTO VIII**: 081 Poster session 2
Interests: My research interest started from fabrication and study perovskite nanolasers and films for nano photonics and photovoltaics respectively. Later I went to Jena, concentrated in HHG from nano solids - TMDC and QD. Later on I would like to move towards topological phenomena in strong fields and further studies of TMDC.
Areas: North America, Europe, East Asia, South-Eastern Asia, Oceania

Tran-Chau Truong, University of Central Florida.
PhD Defense: 12/12/23; **Can Start**: 01/02/24; **At ATTO VIII**: Talk in session M4, poster R69
Interests: I'm working on generating few-cycle pulses to get isolated attosecond pulses for attosecond interferometry. Besides that,I'm also working on developing the single-shot optical sampling. Although my graduation is in next 1.5 year, but I would like to discuss about the reseach oppotunities which can be available this time.
Areas: North America, Europe

Karl Michael Ziems, Max Planck School of Photonics, Friedrich-Schiller University Jena
PhD Defense: 4/1/23; **Can Start**: 5/1/23; **At ATTO VIII**: Posters M43, T16
Interests: theoretical chemical physics, strongfield physics, quantum dynamics, numerical TDSE, semi-classical dynamics, quantum chemistry, scattering, ionization.
Areas: North America; Europe.

Arqum Hashmi, Kansai Photon Science Institute, QST, Kyoto, Japan.
PhD Defense: 1/11/84; **Can Start**: 5/2/23; **At ATTO VIII**: Highlighted poster R71 (session RA)
Interests: I am a theoretical condensed matter physicist. My field is Benchmark DFT plus Time dependent DFT (TDDFT) calculations. Recently, I am working on the phenomena caused by strong spin orbit coupling (SOC) effect in crystals by using TDDFT. In this regard, I have focused on the ultrafast (femtosecond) control of electrons and its spin at the fundamental quantum level provide a promising way towards future high-speed applications.
Areas: North America, South America, Europe, East Asia, South-Eastern Asia.

Min Chen, Louisiana State University.
PhD Defense: 9/1/22; **Can Start**: 10/1/22; **At ATTO VIII**: Highlighted poster R35 (session RC)
Interests: attosecond dynamics, electron spectroscopy, plasmonic dynamics, photochemistry.
Areas: North America, Europe, East Asia.

Mattias Bertolino, Lund University.
PhD Defense: 5/26/23; **Can Start**: 10/1/23; **At ATTO VIII**: Poster M17
Interests: Photoelectron spectroscopy, laser-assisted photoionization, time-dependent simulations.
Areas: North America, South America, Europe, East Asia, South-Eastern Asia.

Andrew Forembski, Dublin City University.
PhD Defense: 4/7/23; **Can Start**: 6/1/23; **At ATTO VIII**: Poster M25
Interests: Scientific modelling, GPGPU computing, HPC computing, Theoretical AMO Physics, Theoretical Quantum Mechanics.
Areas: Europe.

Spencer Walker, JILA and Department of Physics, University of Colorado, Boulder.
PhD Defense: 10/1/23; **Can Start**: 12/1/23; **At ATTO VIII**: Posters M12 and M14
Interests: VUV and DUV reconstruction of attosecond pulses and pulse trains. Strong field ionization from 1nm to 1000 nm. 50% interest in analytic results and 50% interest in HPC. Atoms for now, solids later.
Areas: North America, Europe, Oceania.

Aderonke Folorunso, Louisiana State University.
PhD Defense: 5/31/23; **Can Start**: 8/1/23; **At ATTO VIII**: Talk in session R1
Interests: Attoscience technology Time-resolved Attosecond Charge Migration
Areas: North America.

Lun Yue, Louisiana State University.
PhD Defense: 5/1/16; **Can Start**: 8/1/23; **At ATTO VIII**: Posters T60, R62
Interests: Strong-field and ultrafast physics in atoms, molecules, and solids. Theory and numerical code development.
Areas: North America, Europe.

Saurabh Mhatre, Institute of Physical Chemistry, FSU Jena.
PhD Defense: 12/15/22; **Can Start**: 12/1/22; **At ATTO VIII**: Poster T45
Interests: Light-Matter interactions, Ultrafast dynamics, Theoretical chemistry, Material Science, Astrochemistry, Machine learning.
Areas: North America, Europe, Western Asia, South-Eastern Asia, Oceania.

Kalyani Chordiya, ELI-ALPS, HU.
PhD Defense: 1/1/23; **Can Start**: 2/1/23; **At ATTO VIII**: Poster R51
Interests: My research interests are charge migration, transfer and/or transport in molecules and solid-state materials. I would like to continue that to quantify the charge migration in closed ring systems and develop a method to predict the first ionization potential for larger systems. I am working towards simulations of laser induced processes such as alignment and orientation of system, HHG, adiabatic and non-adiabatic charge migration in molecular systems. I would like to explore the simulations further to study the ionization rate, photoelectron spectra and develop a platform where we can combine these measurements to reproduce the experimental data. These all theoretical models are in developing phase and after learning how to use existing tools I would like to move towards fine tuning the existing models. For example, developing theory to study the correlated HHG in molecular systems.
Areas: North America, Europe, Southern Asia.

Soumyajit Saha, Department of Physics, Stockholm University.
PhD Defense: 9/13/19; **Can Start**: 11/1/22; **At ATTO VIII**: Posters M02, M27
Interests: My research interests mostly include photoionization/photodetachment and collision physics. Currently I am working in attosecond physics. I have worked with many body techniques like Random Phase Approximation with Exchange, Relativistic Random Phase Approximation with Exchange and Relativistic Random Phase Approximation.
Areas: North America, Europe, East Asia, Southern Asia, Oceania.

Imam S. Wahyutama, Lousiana State Univesity.
PhD Defense: 7/18/19; **Can Start**: 12/15/22; **At ATTO VIII**: Poster T29
Interests: molecular ultrafast dynamics, strong-field physics, high-harmonic generation, theoretical quantum chemistry, high-performance computing, MCTDHF, TDHF, TDDFT, WFAT.
Areas: North America, Europe, East Asia, South-Eastern Asia.

Andrés Ordóñez, ICFO.
PhD Defense: 11/29/19; **Can Start**: 04/02/23; **At ATTO VIII**: Talk in session M2
Interests: Light-matter interactions in general, chirality, structured EM fields, geometry, topology.
Areas: Europe

Mengqi Yang, Louisiana State University.
PhD Defense: 05/31/23; **Can Start**: 05/31/23; **At ATTO VIII**: poster T31
Interests: electron dynamics simulation, strong field ionization, X-ray scattering, electron spectroscopy.
Areas: North America, Europe