

# Max Rakitin

## Conferences, talks, workshops and schools

### About

Name: Max Rakitin (a.k.a. Maksim S. Rakitin)

Summary: I am a group leader of the Data Acquisition and Detectors group of the Data Science and Systems Integration Division of NSLS-II, BNL.

News: “Computer, Is My Experiment Finished?” (September 16, 2022)  
<https://www.bnl.gov/newsroom/news.php?a=220832>




















“Seeing the Forest Through the Trees: Brookhaven Lab Scientists Develop New Computational Approach to Reduce Noise in X-ray Data.” (April 18, 2022)  
<https://www.bnl.gov/newsroom/news.php?a=219533>








“EPICS Collaboration Meeting (workshop organizer)” (September 16–20, 2024)  
<https://conference.sns.gov/event/448/timetable/?view=standard>
















Links: [o BNL](#) • [mrakitin.github.io](#) • [SBU](#) • [SUSU](#)  
[o @mrakitin](#) • [in @mrakitin](#) • [Google Scholar](#) • [ResearchGate](#)  
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- 2026.05 **Invited talk** — *Application of the Bluesky data acquisition framework and the Blop optimization tool for NEXT-II ARI & SXN beamlines* [📄](#), NSLS-II & CFN Users' Meeting 2026, Workshop 11 — “Soft X-ray Nanoprobe – First Science Opportunities, Instrumentation and Practice”, Brookhaven National Laboratory, Upton, NY
- 2026.02 *Blop: Bluesky-based Beamline Optimization package*, demonstration for U.S. Department of Energy Under Secretary for Science Darío Gil [🔗](#), Brookhaven National Laboratory, Upton, NY
- 2025.11 *Blop: beamline optimization package* [🔗](#), ROCK-IT Bluesky Workshop, Deutsches Elektronen-Synchrotron (DESY), Hamburg, Germany
- 2025.02 *Bluesky – status and future plans*, Collaboration visit, Paul Scherrer Institute (PSI), Villigen, Switzerland
- 2025.02 *Blop: Bluesky-based Beamline Optimization package*, Collaboration visit, Helmholtz-Zentrum Berlin (HZB), BESSY-II, Berlin, Germany
- 2024.09 **Invited talk** — *Automated Beamline Alignment and Experiment Steering* [🔗](#), SSRL/LCLS Users' Meeting, “MFX-HE: Opportunities for High-Throughput Multimodal Structural Studies and Their Computational Challenges” Workshop, Menlo Park, CA

- 2024.09 **Workshop organizer** — *Bluesky and Bluesky-Queueserver tutorials*  , EPICS Collaboration Meeting, Oak Ridge National Laboratory, Oak Ridge, TN
- 2023.11 **Invited talk** — *Bluesky for Multimodal Studies at NSLS-II* , “Integrating acquisition and AI in tomography” Workshop, Leiden, The Netherlands
- 2023.08 *Recent updates of the Sirepo-Bluesky library for virtual beamline representation*, SPIE Optics + Photonics, Advances in Computational Methods for X-Ray Optics VI , San Diego, CA
- 2023.05 **Invited teacher** at *Beamline and Optics Modeling School* , Advanced Light Source, Berkeley, CA
- 2023.04 *Ophyd beyond EPICS* , NSLS-II & CFN Users’ Meeting, Workshop 4 — “Scientific Python for Data Acquisition, Management, and Analysis”, Brookhaven National Laboratory, Upton, NY
- 2023.03 *AE124: Simulation-aided Instrument Optimization using Artificial Intelligence and Machine Learning Methods* , 25<sup>th</sup> Annual Accelerator Test Facility (ATF) Users’ Meeting, Brookhaven National Laboratory, Upton, NY
- 2022.08 **Invited talk** — *Automated beamline alignment at NSLS-II* , ALS User Meeting, “Instrumentation and Computation for the Upgraded ALS” Workshop, Virtual Meeting
- 2022.05 **Invited talk** — *24/7 access to your virtual beamline with Sirepo* , NSLS-II & CFN Users’ Meeting, Workshop 6 — “Data Access and Machine Learning at NSLS-II”, Brookhaven National Laboratory, Upton, NY
- 2022.03 **Invited talk** — *Next generation experimental data access at NSLS-II* , SRI2021, Virtual Conference
- 2020.02 **Invited talk** — *Bluesky Data Collection Framework*, Canadian Light Source, Saskatoon, Canada
- 2019.10 *Overview of Bluesky*, Imaging Workshop, Oak Ridge National Laboratory, Oak Ridge, TN
- 2019.07 *Kitware training on vtk.js, girder, tomviz, vtk, paraview, and cmake*, Clifton Park, NY
- 2019.06 *Jupyter Community Workshop* , LBNL, Berkeley, CA
- 2019.06 *Ptycho Developer Workshop* , LBNL, Berkeley, CA
- 2019.01 **Invited talk** — *Bluesky, ophyd, pseudo motors, detectors* , Automation in Beamline Control and Data Acquisition workshop, HZB, BESSY-II, Berlin, Germany
- 2019.01 **Invited tutorials on Sirepo and Bluesky** , Automation in Beamline Control and Data Acquisition workshop, HZB, BESSY-II, Berlin, Germany
- 2018.10 *NOBUGS 2018*  , Brookhaven National Laboratory, Upton, NY
- 2018.07 *SciPy 2018* , Austin, TX
- 2018.06 *EPICS Collaboration meeting* , APS, Argonne National Laboratory, Lemont, IL
- 2018.05 *2018 NSLS-II & CFN Users’ Meeting: assisting with “Hands-On Data Acquisition and Analysis Tutorial”* , Brookhaven National Laboratory, Upton, NY
- 2017.11 *Sirepo — an open-source browser interface for X-ray source and optics simulations*, ORNL Visualization Hackathon, Oak Ridge National Laboratory, Oak Ridge, TN
- 2017.10 *Sirepo — an open-source cloud-based software interface for X-ray source and optics simulations*, NSLS-II Lunchtime seminar, Brookhaven National Laboratory, Upton, NY

- 2017.08 **Invited talk** — *Sirepo: a web-based interface for physical optics simulations — its deployment and use at NSLS-II*, SPIE Optical Engineering + Applications , San Diego, CA
- 2017.05 *2017 NSLS-II & CFN Users' Meeting* , Brookhaven National Laboratory, Upton, NY
- 2016.12 *Collaboration meeting with RadiaSoft LLC*, Boulder, CO
- 2016.12 *Early Career Researcher Symposium 2016*, Brookhaven National Laboratory, Upton, NY
- 2016.10 *Software for Optical Simulations (SOS) Workshop*  , ICTP, Trieste, Italy
- 2016.05 *2016 NSLS-II & CFN Joint Users' Meeting* , Brookhaven National Laboratory, Upton, NY
- 2015.11 *Sensitivity, Error and Uncertainty Quantification for Atomic, Plasma, and Material Data* , IACS, Stony Brook University, Stony Brook, NY
- 2015.10 *Collaboration Meeting on "Simulation and Modeling for SR Sources and X-Ray Optics"*, NSLS-II, Brookhaven National Laboratory, Upton, NY
- 2015.07 **Invited talk** — *Crystal and protein structure modeling, software development and applications*, Brookhaven National Laboratory, Upton, NY
- 2015.06 *Advances in Functional Materials — Conference 2015*, Stony Brook University, Stony Brook, NY
- 2015.06 *Recent progress in USPEX development*, Group seminar, Stony Brook University, Stony Brook, NY
- 2015.04 **Invited talk** — *Crystal structure prediction from first principles* , Humboldt-Universität zu Berlin, Institut für Physik, Berlin, Germany
- 2015.04 *Oracle R, Advanced & predictive Analytics Workshop*, Stony Brook University, Stony Brook, NY
- 2015.02 *MATLAB & Simulink for Project-Based Learning using LEGO MINDSTORMS EV3*, Stony Brook University, Stony Brook, NY
- 2015.01 *IACS workshop "Intro to Python"* , Stony Brook University, Stony Brook, NY
- 2014.11 *Novel phase of beryllium fluoride at high pressure*, Group seminar, Stony Brook University, Stony Brook, NY
- 2014.11 **Invited tutor** — *Theory and Computation for Interface Science and Catalysis: Fundamentals, Research and Hands on Engagement using VASP*  , Brookhaven National Laboratory, Upton, NY
- 2014.10 *MATLAB and Simulink Complimentary Technical Sessions at Stony Brook University*, Stony Brook, NY
- 2014.09 *Proteins structure prediction using USPEX*, Group seminar, Stony Brook University, Stony Brook, NY
- 2014.09 *USPEX tests for Tinker: Different amino-acids XYZ-20, ALA-40, CASP10, REMD*, Group seminar, Stony Brook University, Stony Brook, NY
- 2014.07 *Introduction to Python*, Group seminar, Stony Brook University, Stony Brook, NY
- 2014.04 *SiO<sub>2</sub> and BeF<sub>2</sub> phase transformation under pressure. Proteins simulation with Tinker interface for USPEX*, Group seminar, Stony Brook University, Stony Brook, NY

- 2014.03 *CECAM workshop "Simulation of biomolecular interactions with inorganic and organic surfaces as a challenge for future nanotechnologies"* , Toulouse, France
- 2014.03 *USPEX mini-workshop*, Group seminar, Stony Brook University, Stony Brook, NY
- 2014.02 *SiO<sub>2</sub> and BeF<sub>2</sub> phase transformation under pressure*, Group seminar, Stony Brook University, Stony Brook, NY
- 2013.11 *Study of impurities influence on the hydrogen dissolution energy in the bcc iron*, Group seminar, Stony Brook University, Stony Brook, NY
- 2013.08 *2<sup>nd</sup> summer school on computer simulations in modern physics* , Chelyabinsk, Russia
- 2012.08 *Summer school on computer simulations and massive calculations in modern physics* , Chelyabinsk, Russia
- 2011.10 *6<sup>th</sup> All-Russian scientific-technical conference "Physical properties of metals and alloys"* , Yekaterinburg, Russia
- 2011.09 *International conference "Thermodynamics 2011"*, Athens, Greece
- 2011.05 *2<sup>nd</sup> All-Russian youth school-conference "Modern problems of metal science"* , Pitsunda, Abkhazia
- 2010.07 *International symposium "Metal-hydrogen systems. Fundamentals and applications"*  , Moscow, Russia
- 2010.06 *International summer school "Computational Materials Science"* , San Sebastian, Spain
- 2010.03 *All-Russian conference "Parallel computing technologies 2010"* , Ufa, Russia
- 2010.02 *33<sup>rd</sup> International conference on theoretical physics "Kourovka-2010"*  , Novouralsk, Russia
- 2009.11 *9<sup>th</sup> International conference "High-performance parallel computing on cluster systems"* , Vladimir, Russia
- 2009.10 *12<sup>th</sup> V.A. Fock All-Russian conference on quantum and computational chemistry* , Kazan, Russia
- 2007.04 *13<sup>th</sup> All-Russian students conference in physics*  , Rostov-on-Don, Russia