

The 1st Artificial Intelligence for Nuclear Physics Winter School (AI4NP) will occur on **January 11-15, 2021** online. The goal is to give the participants a deeper understanding on what Artificial Intelligence and Machine Learning are and how they can be used to analyze data, design new detectors, controls, and calibration systems for nuclear physics experiments and perform theoretical calculations of nuclear many-body systems. The AI4NP Winter School will consist of a combination of lectures and guided hands-on exercises covering a variety of topics from the basics of neural networks to real life applications in theoretical and experimental Nuclear Physics. We are primarily targeting graduate students (both Master of Science and PhD) and post-doctoral researchers in nuclear experiment and theory, but participants of all levels of expertise are welcome including absolute beginners in the topic.

The 2021 AI4NP Winter School will proceed via Zoom owing to the Covid-19 challenge. Sessions will be held 11:00-16:00 (Eastern US Time) on each day.

The Lecturers are Michelle Kuchera (Davidson College) Alessandro Lovato (ANL) Corey Adams (ANL) Cristiano Fanelli (MIT) Nobuo Sato (Jefferson Lab)

The detailed schedule can be found at https://www.jlab.org/indico/event/409/timetable/#20210111

There is no fee for registration The number of registrants is limited to 50 students, first come, first serve <u>https://www.jlab.org/indico/event/409/</u> Registration opens: November 20th, 2020 Registration closes: December 20th, 2020

Organizers: Paulo Bedaque (UMD), Amber Boehnlein (JLab), and Tanja Horn (CUA) Sponsored by Department of Energy, Office of Science, Office of Nuclear Physics



