

UK-US Academic Network in Nuclear Security and Non-Proliferation

Online Workshop, 27- 28 April, 2021

Paul Sellin, University of Surrey



Consortium for Monitoring,
Technology, and Verification



Science and
Technology
Facilities Council



Welcome

Welcome to the launch of the UK-US Academic Network in Nuclear Security and Non-Proliferation. The network has been set up to promote academic collaboration in nuclear security topics between UK researchers and member of the NNSA University Consortia

The 3 NNSA University Consortia



Led by Georgia Tech



Led by UC Berkeley



Consortium for Monitoring,
Technology, and Verification

Led by University of Michigan

For the UK, the collaboration is managed by the STFC Nuclear Security Science Network



Led by University of Surrey



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Aims of the Workshop

The network aims to support mobility, research and training programs to connect UK and US researchers working in the areas of nuclear skills, nuclear security, and nuclear energy.

Our workshop will showcase current research from our communities, and will help develop new collaborations between researchers.

Over the next 2 days we have 24 speakers covering topics across these areas:

- Radiation Detection
- Nuclear Physics
- Antineutrinos
- Remote Sensing
- Machine Learning
- Big Data
- Robotics

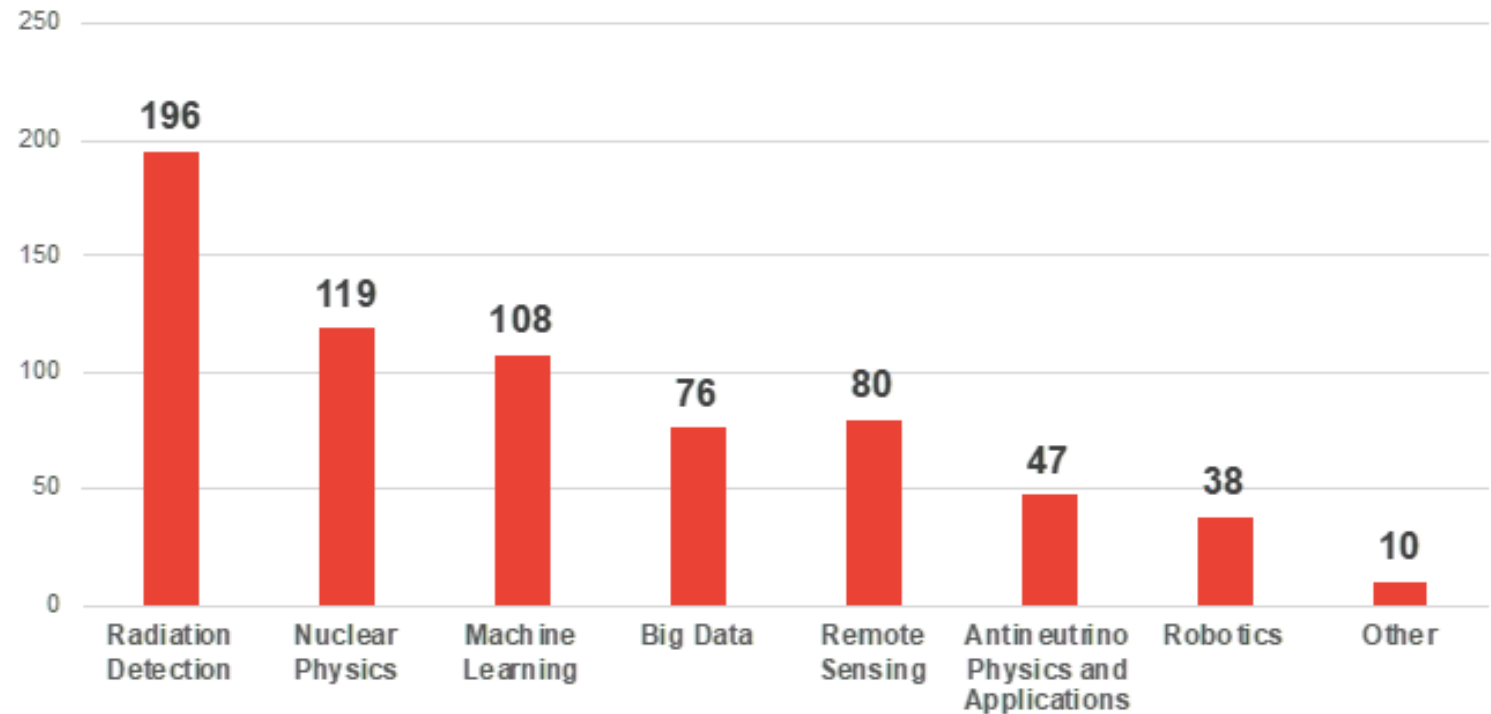
Workshop Registrants

Registrants by Country

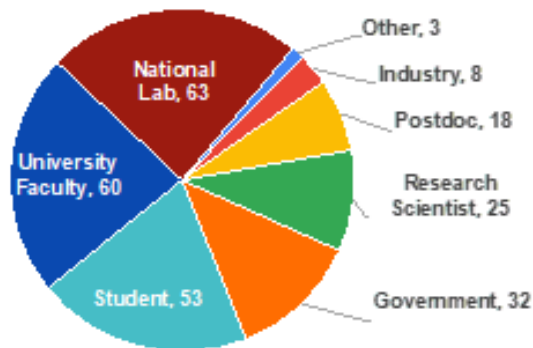


We have 262 delegates registered

Areas of Interest



Registrants by Profession



Online Agenda

The agenda is online at <https://mtv.engin.umich.edu/us-uk-workshop-2021/>

Workshop Agenda

Agenda at a glance

All Times are U.S. Eastern

[April 27: Click here to view slides and speaker profiles](#)

Overview

10:00	Workshop Welcome, Paul Sellin, University of Surrey
10:15	Consortium for Monitoring, Technology, and Verification Overview, Sara Pozzi, University of Michigan
10:30	Overview of the Activities within the Consortium for Enabling Technologies and Innovation, Anna Erickson, Georgia Institute of Technology
10:45	Nuclear Science and Security Consortium Overview, Jasmina Vujic, University of California at Berkeley
11:00	UK Programs Overview, Robin Grimes, Imperial College of London
11:15	BREAK
Science for Nonproliferation Talks	
11:30	Watchman, Matthew Malek, The University of Sheffield

Presenter Detail

- Dates & times
- Abstract
- Bios
- Slides

UK-US Academic Network – April 27

Presentations

[Click here to join the virtual meeting.](#)

Tuesday,
April 27
10:00 (ET)

[Workshop Welcome](#)



Paul Sellin
University of Surrey

Paul Sellin is a Professor of Physics at the University of Surrey, UK. He is the PI of the UK Nuclear Security Network, which is a research network that facilitates collaborative research across the UK in topics related to Nuclear Security and Non-Proliferation.

Click on title
for Abstract

From the online agenda you can access:

- Presentations PDFs
- Speaker Bios and Abstracts

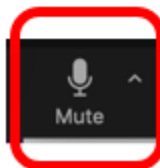
The Zoom workshop experience

The Virtual Experience

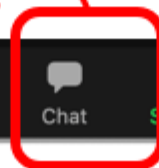


Mute Microphones

- Unless otherwise instructed

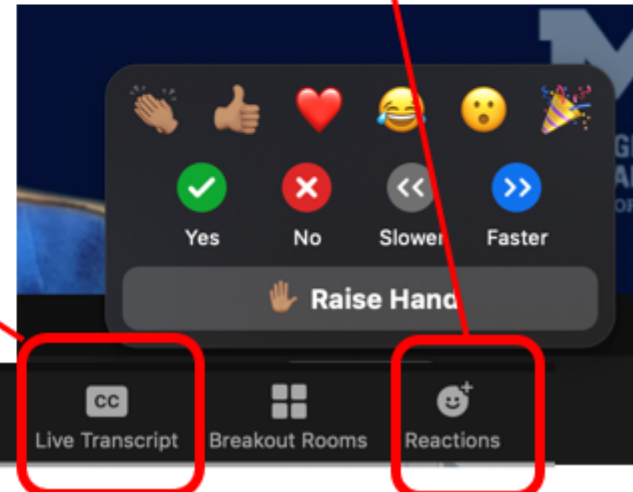


Use Chat for questions or comments



Turn on Closed Captions

- Available throughout the meeting



Raise Hands

- Under Reactions

Breakout Rooms

A primary aim of this workshop is to encourage collaboration between UK and US researchers.

For the final session of each day we will hold informal networking in Zoom breakout rooms. There will be several breakout rooms available for delegates to join, organized by research themes. Please use this opportunity to meet the day's speakers and your fellow delegates.

The Tuesday breakout rooms will be:

Room 1: Neutrino/Antineutrino Applications

Remote Reactor Monitoring with the AIT-NEO Project, Matthew Malek,
The University of Sheffield

Neutrinos for nuclear security, Patrick Huber, Virginia Polytechnic
Institute and State University

Room 2: Fundamental Physics

Event-by-Event Neutron and Photon Multiplicity Correlations in Nuclear
Fission, Shaun Clarke, University of Michigan

Room 3: Nuclear Data

Nuclear Data, Computing and Optimization in Nuclear Applications,
Vladimir Sobes, The University of Tennessee

Room 4: Muon Applications

Nuclear Applications of Cosmic-ray Muography, Ralf Kaiser, University of Glasgow

Room 5: Radiochemistry

From Radiochemical Synthesis to Separations at the Edge of the Periodic Table,
Rebecca Abergel, University of California, Berkeley

Room 6: Additive Manufacturing

The Use of High-Throughput Methods for Signature Definition in Metal Additive
Manufacturing, Dan Thoma, University of Wisconsin-Madison

Room 7: NuSec network

Guidance on the NuSec collaboration funding for UK participants

Funding Opportunities

There is a range of funding available to support UK and US researchers develop collaborations together. Funds are available for Travel Grants, eg:

- Travel between US and UK partners, including graduate student research visits
- Conference/Training Workshop support

US Researchers: funds are provided through your NNSA consortium

UK Researchers: funds are provided through the NuSec Collaboration Grant Scheme which will also support small pilot research projects and summer student projects

For UK researchers, please visit us in the NuSec breakout room at the end of each day to find out more about the Collaboration Grant Scheme, or refer to www.nusec.uk/nnsa



Session 1 - Overview

15:15
UK time

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10:30	Overview of the Activities within the Consortium for Enabling Technologies and Innovation, Anna Erickson, Georgia Institute of Technology
10:45	Nuclear Science and Security Consortium Overview, Jasmina Vujic, University of California at Berkeley
11:00	UK Programs Overview, Robin Grimes, Imperial College of London

16:00
UK time