

9th NExT PhD Workshop
Thursday 11 July 2019 11.30-13.00, Cosener's House, Abingdon

Please read the following biographical details before the SEPnet Employer Panel session so you can prepare some questions for our panellists.

Biographical Details

Alys Brett

Alys Brett works for UKAEA at Culham Centre for Fusion Energy in Oxfordshire (www.ccf.ac.uk). She has a background in physics and has worked as a software engineer in research organisations for over 10 years. She now leads a team of seven software engineers responsible for data systems and tools for the JET experiment – the largest nuclear fusion reactor in the world. She is joint-chair of the UK Research Software Engineers' association (www.rse.ac.uk) which aims to improve research software by improving recognition and career structures for the people who develop it.

Cassie Hill

I joined AWE in 1998 with an MPhys from the University of Birmingham. I initially worked on a computer code to calculate X-ray absorption in plasmas. I then ran a small team who were responsible for modelling the properties of high-density plasmas and worked closely with experimentalists on the Orion laser interpreting experimental data.

I'm currently a group leader for a mixed group of theoretical and experimental physicists who are working on improving our knowledge of a wide range materials properties, such as high-pressure equation of state and neutron and X-ray cross-sections.

Aquila Mavalankar

Dr Aquila Mavalankar is an experimental physicist specialising in the fabrication, evaluation and electronic measurement of semiconductor nanostructures. Aquila has been awarded the prestigious Industry Fellowship awarded by the Royal Society and has partnered with the Rutherford Appleton Laboratory (STFC) to further develop Adaptix technology.

Prior to joining Adaptix, Aquila was a postdoctoral researcher at the University of Oxford where she worked on the fabrication and implementation of quantum logic circuits based on carbon-nanotube transistors. Her specialisation in the area of semiconductor devices and electronic measurements began with her PhD completed from the Cavendish Laboratory at University of Cambridge. She is interested in mentorship and mentors in association with the Windsor Fellowship.

Stewart Martin-Haugh

Stewart has an MPhys in theoretical/computational physics from University of York and a PhD in experimental particle physics from University of Sussex. He currently works as a Staff Scientist in the Particle Physics Department at Rutherford Appleton Laboratory.

Stewart works on the software that filters data at the ATLAS experiment - without this filtering they would fill up every hard drive in the world within a few weeks and most of the information would be useless. Working at a UK national laboratory is a different experience to a traditional academic career - he doesn't teach but can spend more time on research, at least in principle!

Caterina Minelli

Caterina Minelli is a physicist at the UK National Physical Laboratory (NPL) working in the field of nanomaterials' metrology. Caterina studied High Energy physics in Florence, Italy

and obtained a PhD in Nanotechnology from the École Polytechnique Fédérale of Lausanne (Switzerland) in 2004. She was subsequently awarded two fellowships to work in the field of nano-medicine at research institutions in Japan and the UK, including the prestigious EU Marie Curie individual fellowship. Caterina has been at NPL since 2010 where she is currently working at developing the metrology infrastructure underpinning the industrial exploitation of particle-based technologies and supporting innovation in medicine manufacturing.

Rosh Sellahewa graduated from the University of Surrey with a PhD in Theoretical Nuclear Physics, focussing on neutron stars and super-fluidity. Upon leaving academia Rosh started off working in management consulting, giving project management support to major government clients. Rosh then moved to KPMG to give data management support in the software storage industry.

After growing his data processing and analytics skills, Rosh moved into the trader surveillance team where he helped develop models to identify fraudulent activity. Having gained experience as an Analyst Rosh moved from KPMG to Deloitte where he joined the Banking Analytics Team as an Assistant Manager providing analytics and modelling support to a range of financial services clients. In September 2018 Rosh was promoted to Manager and now runs the Analytics and Modelling Team for the Insurance division within Deloitte's audit and assurance arm.