



York Society of Engineers

7:30 pm. Thursday 07 March 2024

Live Lecture

**Room P/L/001, Physics/Electronics Building, Campus West,
University of York**

UKAEA Fusion Technology Facility

by

**A Senior Member of the Operations Team for Fusion
Technology at UKAEA**



The goal of the UK Atomic Energy Authority is to ‘lead the delivery of sustainable fusion energy and maximise the scientific and economic benefit’, and we strive towards this goal with every decision we make.

UKAEA intend to put Fusion Energy onto the UK grid by the 2040’s; to do that will require a leap from the theory and science of fusion, into the manufacture and delivery of fusion machines. The Fusion Technology Facility (or FTF) in the heart of Rotherham’s ‘Advanced Manufacturing Park’ will be at the forefront of that transition.

Achieving fusion involves working at the forefront of science, engineering, and technology. Teams of scientists and Engineers work from the FTF, all specialising in different aspects required to make Fusion Energy a reality. Their mission is to develop and mature manufacturing technologies of critical components, and to develop inspection technologies for the controlled testing of components under the extreme conditions found in commercial fusion.

The FTF will house testing equipment such as CHIMERA (Combined Heating Magnetic Research Apparatus). CHIMERA is a bespoke, world leading, materials testing facility. It uses high temperatures, high magnetic flux and a large vacuum chamber to replicate fusion conditions, meaning that materials can be rigorously tested and qualified before being introduced into the fusion energy plants of the future.

With world leading research being undertaken, and strong links to local universities and industrial partners being formed, UKAEA’s Fusion Technology Facility puts South Yorkshire at the centre of a growing sustainable, low carbon, energy economy.

Please also see the following YouTube video: [Introducing the Fusion Technology Facility, Rotherham \(youtube.com\)](https://www.youtube.com/watch?v=...)”

Please note, this lecture will be a live talk in Room P/L/001, Physics/Electronics Building, Campus West, University of York.

Wearing of masks is encouraged (but not mandatory); taking a lateral flow test prior to the meeting (with negative result) is also recommended. There is plenty of space in the lecture theatre for “social distancing”.

Please see the Covid-19 guidance below from the University of York:

The safety of our audience members and staff are our priority, and the University of York continues to have strict cleaning regimes and enhanced ventilation in place.

Please note that the University of York is promoting a message of protect, respect and be kind in relation to Covid-19 and we therefore politely ask that all attendees consider wearing a face covering whilst moving around indoors, washing hands regularly and taking a lateral flow test in advance of the event. We also ask that you do not attend if you experience any symptoms that could relate to a Covid-19 infection OR if you are self-isolating. Events staff will wear face coverings (unless exempt) and clear signage will be available to access hand sanitizer and hand washing facilities.