## **School of Physical Sciences Seminar**

**Date**: Friday 1<sup>st</sup> March at 1pm in N115 (Marconi Building)

Light lunch available from 12.45pm

Speaker: Dr. David Long, DCU School of Physical Sciences

Title: Why should we care about the Sun?

David has recently joined the School staff and this will be the first opportunity to hear about his research work. To mark the occasion, we will begin with a light lunch followed by his presentation.

## Why should we care about the Sun?

**Abstract**: As our closest star, the Sun can act as a local astrophysical laboratory, allowing us to study and probe astrophysical phenomena with very high spatial, temporal, and spectral resolution. The Sun is classified as an average star, acting as a reference point for other bodies elsewhere in the Universe, with the solar composition for example often taken as a constant when comparing with other stars. However, it is also highly magnetically active, regularly producing solar flares and eruptions that can adversely affect the near-Earth environment. The origin and evolution of these solar eruptions continues to be an active research area, and with apparently constant solar properties such as the composition shown to be strongly affected by the solar magnetic field, the Sun continues to be a source of detailed investigation. In this talk, I will present some of my recent work examining the origin and evolution of both solar transients and long-term solar composition and discuss why studying the Sun continues to be relevant for astrophysics research.