

University to equip solar telescope

By PRESS ASSOCIATION, 10 February 2015 2.01am. Updated: 3.12am.



Maui is already home to the Pan-Starrs sky survey telescope, known as PS1
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Queen's University Belfast is to play a leading role in building the world's biggest solar telescope.

It is part of a consortium of eight UK universities and businesses to build the cameras for the 344 million US dollars (£226m) super-telescope, which will be situated on a mountain in Maui, Hawaii.

The Daniel K Inouye Solar Telescope (DKist) will be launched in 2019 and is being constructed by the US National Solar Observatory.

Its four-metre diameter main mirror will allow the telescope to pick up unprecedented detail on the surface of the sun - the equivalent of being able to examine a £1 coin from 100 kilometres away, scientists behind the project said.

Professor Mihalis Mathioudakis said: "DKist will be a revolutionary instrument for

ground-based solar physics, which is a growth area in the UK. It will be in a position to explore key questions regarding solar magnetic field generation and dissipation, solar variability, atmospheric structure and dynamics.

"Our consortium will deliver key equipment that will allow DKist to achieve these scientific goals and it's another example of how Queen's research impacts on society, both locally and internationally."

It is hoped that DKist will address fundamental questions at the core of contemporary solar physics.

The academic added: "The sun is the most important astronomical object for humankind with solar activity driving space weather and having profound effects on global climate and technology-based communications.

"To understand solar activity we need to observe and model the physical processes in the solar atmosphere on their intrinsic spatial and temporal scales so that, among other questions, we can reliably forecast this activity in space."

The consortium of UK institutes involved in the telescope project is led by Queen's University Belfast and includes Armagh Observatory, Northumbria University, University College London, and the Universities of Glasgow, Sheffield, St. Andrews and Warwick.

The consortium will partner with Belfast company and Queen's University spinout Andor Technology and the Science and Technology Facilities Council.

The consortium will oversee the development and delivery of the cameras, and take the lead in supporting the UK solar physics community in their use of the telescope.