UK Participation in the Daniel K Inouye Solar Telescope

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Abstract
The Daniel K Inouye Solar Telescope (DKIST), under construction by the US National Solar Observatory, will be a revolutionary instrument for ground-based solar physics. With first light expected in 2019, DKIST will operate in the optical and near infrared and will be the pre-eminent ground-based solar telescope for the foreseeable future. Key advances in its instrumentation over that currently available include ultra-high spatial (25 km on the solar surface), temporal (millisecond) resolution, high resolution imaging spectroscopy and coronal magnetometry.

UK participation in DKIST has been secured with joint funding from STFC, UK Universities and local industry. We will deliver state-of-the-art detectors that will equip all instruments in the visible. This talk will discuss the DKIST science objectives and how these lead to the stringent technical requirements for these detectors.