

**Mercredi 10 avril 2019 à 11h30 (IAS, bâtiment 121, salle 1-2-3)**

**Unveiling the mysteries of the solar corona and wind with DKIST and Solar Orbiter**

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After nearly 20 years of planning and building, two major facilities to study the solar corona and the solar wind will be operational in 2020:

DKIST (first light in 2019) and Solar Orbiter (launch Feb 2020). DKIST, built in Maui, is the first large-scale solar telescope with a 4 m off-axis mirror and will provide unprecedented spectral observations of forbidden coronal lines, which will provide measurements of magnetic field, line widths, densities etc. Solar Orbiter, a major ESA mission, has a suite of remote-sensing instruments (in particular SPICE) built in support of the in-situ ones, to help in locating the source regions of the solar wind. I will briefly outline some of the science we expect to obtain from these missions, with particular emphasis on DKIST.

I will also present some results of a pathfinder mission: AIR-Spec, an airborne near-infrared spectrometer which flew in 2017 and will fly again at the next total solar eclipse.