

PUNCHLunch –

the online lunch seminar of the PUNCH4NFDI Consortium

Every second Thursday, 12:30-13:30 hrs: keynote and discussion



Thursday, 07. April 2022, 12:30 hrs:

Peter Caligari, Nazaret Bello González, Taras Yakobchuk, Svetlana Berdyugina and the SDC Team, Leibniz-Institut für Sonnenphysik (KIS)

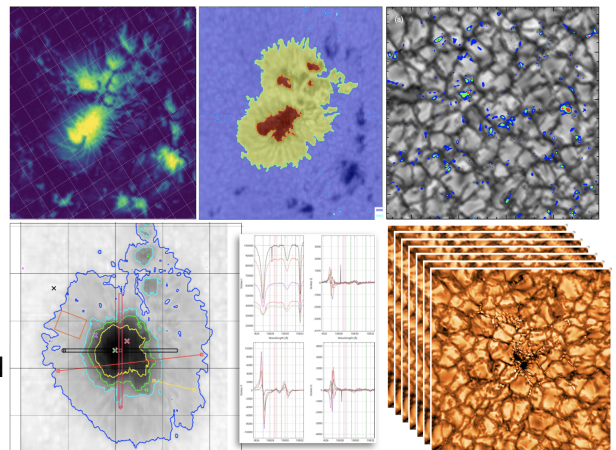
The KIS Science Data Centre

hosting large data volumes from solar telescopes

Abstract:

In November 2021, the Leibniz Institute for Solar Physics (KIS) in Freiburg launched the Science Data Centre to host large data volumes from the ground-based solar telescopes.

The Science Data Centre (SDC) is a new service with a two-fold main purpose: (1) To provide a common platform for the solar community to STORE, ACCESS, ANALYSE, ARCHIVE and DISSEMINATE solar data produced by a heterogeneous group of scientific instruments. And (2) the development of **new diagnostic tools**, like e.g., the stochastic analysis of fluctuations in physical parameters, **data science**, like e.g., research on statistical properties from solar data all over the archive and development of **high-level data products**, like e.g., the automatic inversions of the observed Stokes vector to retrieve the physical parameters (magnetic field vector, line-of-sight velocities, temperature,...) of the solar atmosphere for all archived data.



The first phase of the SDC is dedicated to the data generated by the German solar observatory on Tenerife (Spain), operated by KIS: the 1.5 m GREGOR solar telescope, largest in Europe, and the Vacuum Tower Telescope (VTT). The long-term plan includes further development of the service platform for solar data from other large solar telescopes. New collaborations are planned with the National Solar Observatory (NSO, USA) operating the world-largest solar telescope DKIST. Other future facilities include also the European Solar Telescope (EST), an ESFRI infrastructure fostered by the European solar physics community.

In this PUNCHLunch, we will introduce the SDC concept, its status and current activities including live demos on access to the archived solar data and to high-visualisation tools.

Connection details:

ZOOM Meeting “PUNCHLunch seminar”: <https://indico.desy.de/event/33358/>

Webinar ID: 919 1665 4877, **passcode:** 481572

Next event: Virtual Observatory workflows: The TAP case , 21.04. 2022

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