PUNCHLunch –

the online lunch seminar of the PUNCH4NFDI Consortium

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



Thursday, 25 March 2021, 12:30 hrs:

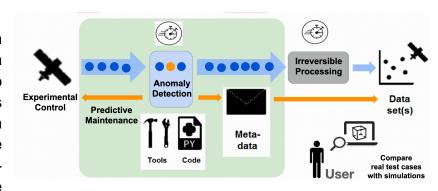
M. Kramer (MPIfR) and A. Redelbach (FIAS Frankfurt)

"Data irreversibility in the PUNCH world"

Challenges in the era of huge data streams

Abstract:

The rapid increase in both data rates and data complexity leads to several vital challenges soon to be seen throughout society as we enter the "Internet-Of-Things" era, where large



sets of "sensors" will transmit data upon which autonomous "actors" will react. Decisions will need to be made, often in real-time and without human intervention, which information to keep or how to compress it. Loss of information will be inevitable and mostly irreversible. Nearly all fields within the PUNCH community face crucial aspects of these challenges already today; they are unavoidable on an even much larger scale for the upcoming generation of experiments.

Concentrating on selected real-life applications – and comparing set-ups where experiments can be controlled (nuclear and particle physics) or merely observed as given (astrophysics) – in this PUNCHLunch we will summarise current challenges of real-time data selections in these fields. We would like to stimulate a discussion how the PUNCH community can interface with similar challenges emerging also in other fields, especially with the focus on the identification of rare or abnormal signals in fast huge data streams.

Connection details:

ZOOM Webinar "PUNCH-Lunch": https://desy.zoom.us/j/94927131622

Webinar ID: 949 2713 1622, passcode: 532479

Next event:

Thursday, 8 April 2021, 12:30 hrs Data analysis platforms (tbc)

Connect to PUNCH4NFDI:

Twitter: @PUNCH4NFDI Mail: punch4nfdi@desy.de Web: www.punch4nfdi.de