



Contribution ID: 13

Type: **Talk**

## Learning from the present for the future: the Jülich LOFAR Long-term Archive

*Friday 13 October 2023 11:35 (25 minutes)*

Forschungszentrum Jülich has hosted the German part of the LOFAR long-term archive since 2013. Currently about 20 petabytes (PB) of data are stored with a growth rate of around 2 PB a year.

Future radio telescopes are expected to have a much higher data rate and bring new challenges in processing and storing data.

Here we briefly report on the current data management of the Jülich LOFAR Data Archive, including the ingestion, the storage system, the export to the long-term archive, and the request chain. We analysed the data access pattern over the last 10 years and give an estimation of the energy consumption of the process. Based on this analysis, we define requirements for future, even more extensive long-term data archives.

### Type of submission

Talk

**Primary authors:** MISKOLCZI, Arpad (Forschungszentrum Jülich); MANZANO, Cristina; STIELE, Holger; PFALZNER, Susanne (Forschungszentrum Jülich); VYBORNOV, Vadim (Jülich Supercomputing Centre JSC)

**Presenter:** STIELE, Holger

**Session Classification:** Public Session