Status report for the Tango Controls Community Meeting 2023

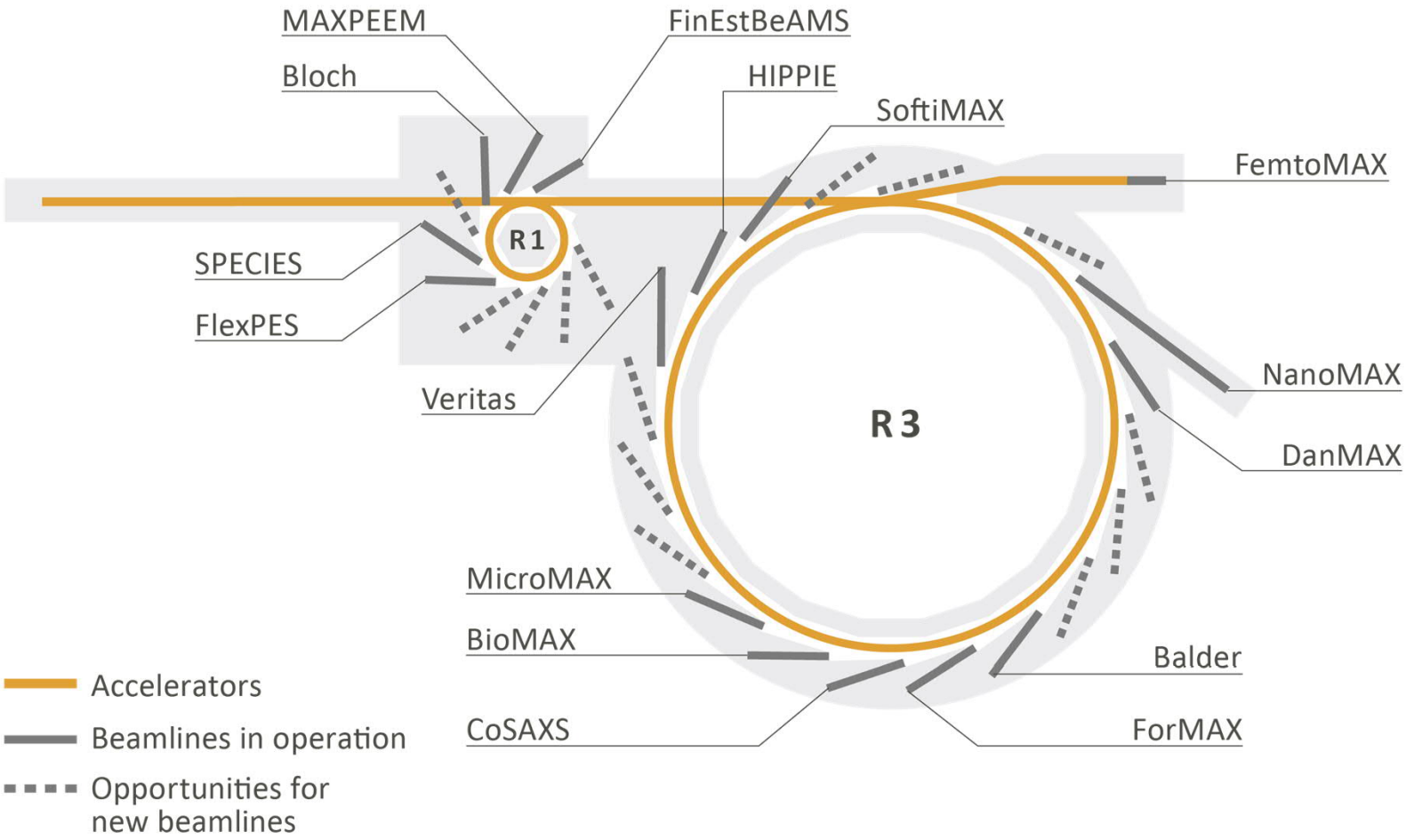
Mirjam Lindberg, Head of the Software Group

Outline

- Background
- New Organisation
- Strategy
- Selected Projects
  - Experiment Control Reliability
  - Spectrometer Integration
  - Archiving Upgrade
- Collaborations
- Highlights

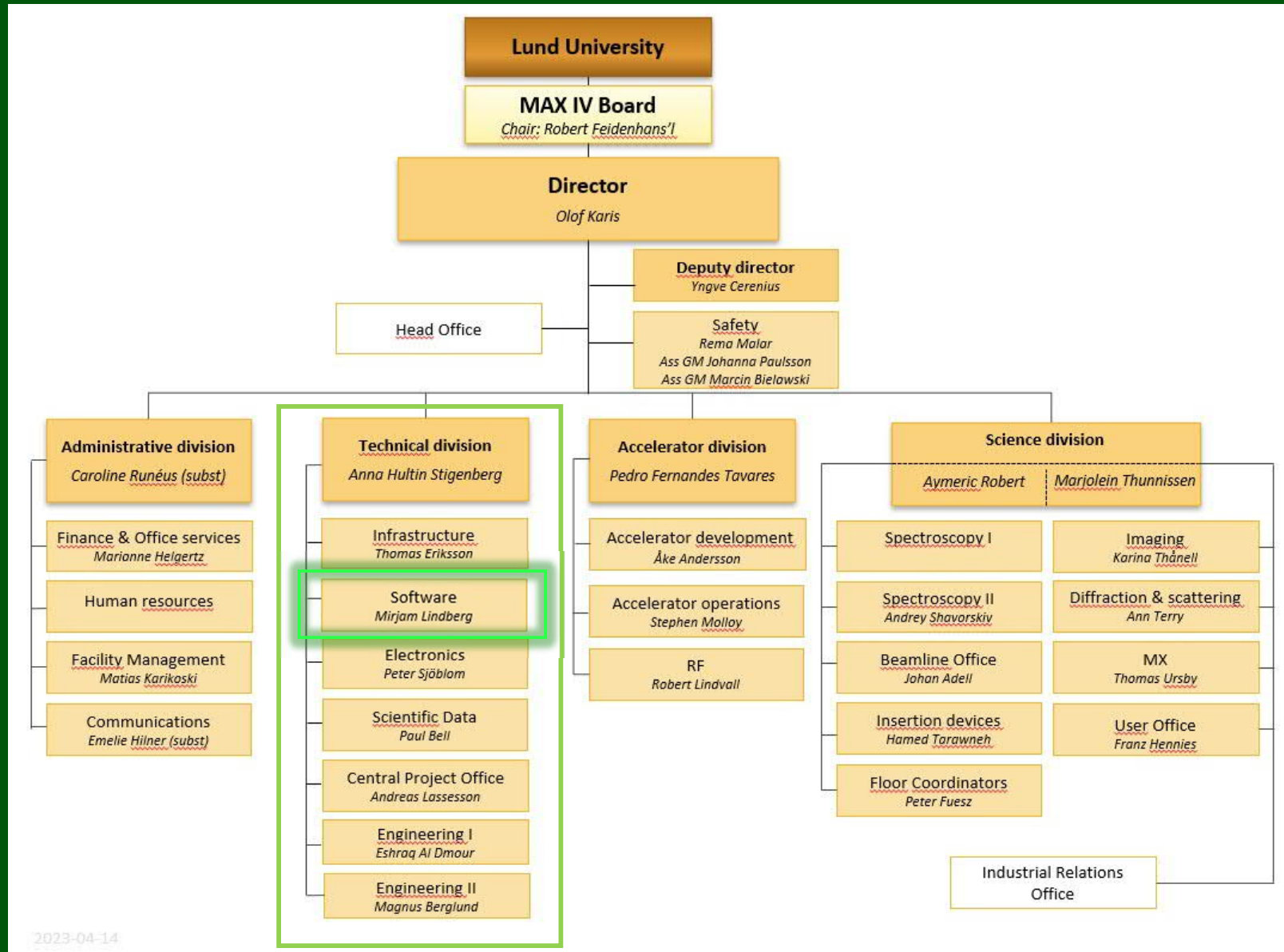
MAX IV Laboratory

- Lund, Sweden
- 4th generation synchrotron
- 16 beamlines
- In operation since 2016
- > 300 employees
- > 1000 users/year
- > 24000 Tango devices



MAX IV Organisation

- New Technical Division
- Software group moved from Science Division
- Enabling operational excellence
- Enabling world leading technology and science



Strategy and Roadmap

- MAX IV strategy 2023–2032 – MAX IV (lu.se)
- Technical Division: Enabling technology, systems and solutions
- Some goals from the Software Group Roadmap for the next 2 years:

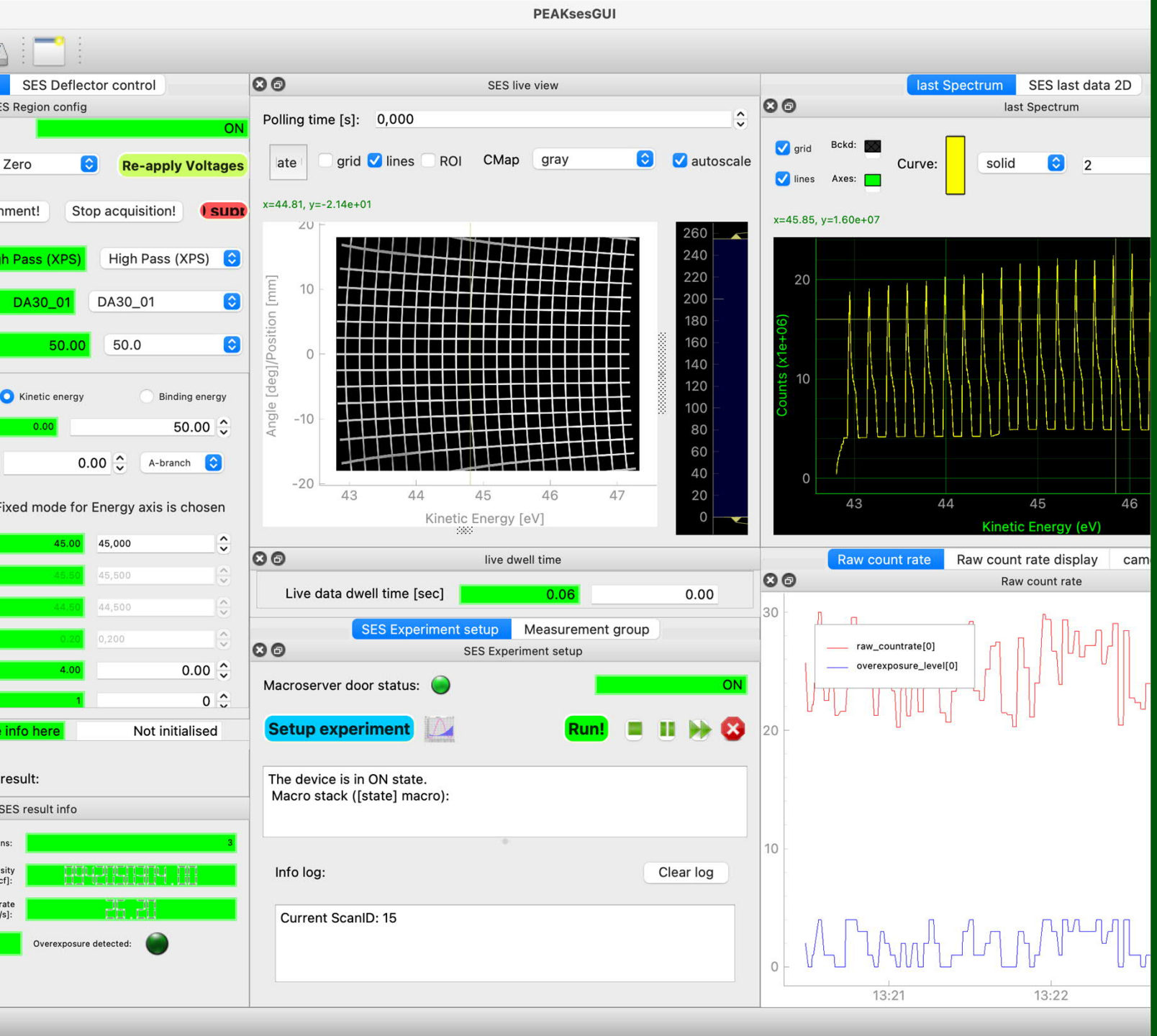
- **Reduce the measurement time**
  - implement continuous and time-resolved scan modes
  - integrating soft X-ray spectrometers
  - scan failure prevention and recovery strategy
- **Enable a more user-friendly support level**
  - better alarm, diagnostic and test systems
- **Stabilize the operation of the beamlines**
  - regular investigation and follow up of reported issues (KITOS support organisation)
- **Active participation in collaborations**
  - European and international facilities
  - industry and academia

Project: Experiment Control Reliability (Sardana)

- Improve reliability
- Improve diagnostics
- Improve recovery
- Improve knowledge

TECHNICAL DIVISION
SOFTWARE GROUP

MAX IV



Project: Spectrometer Integration (Tango/Sardana/Taurus)

Scienta Omicron PEAK

- PEAK library
- Tango device
- Taurus UI
- Sardana integration

Specslab Prodigy Remote Control Protocol

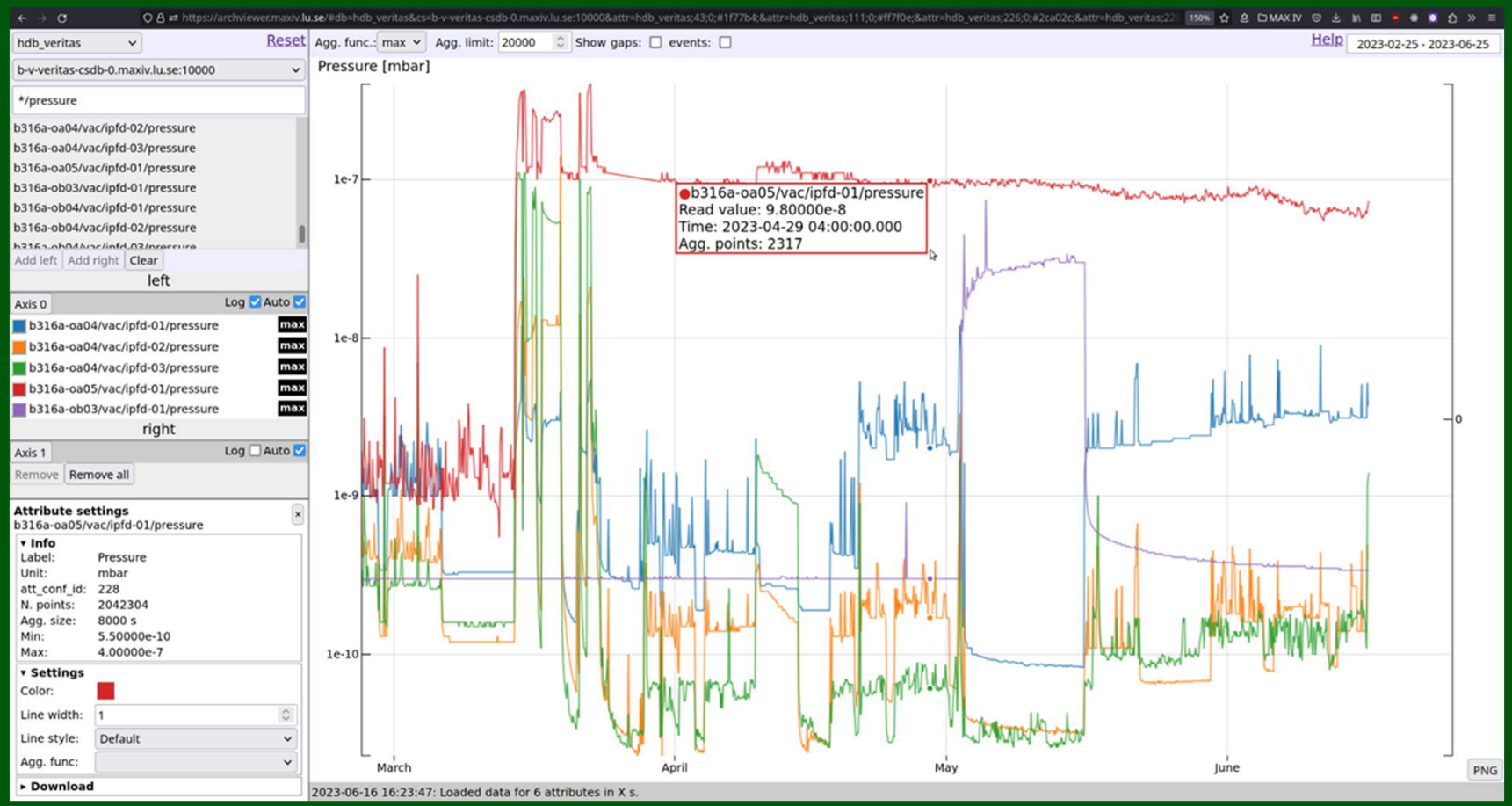
- Tango device
- TBD Sardana
- TBD UI

TECHNICAL DIVISION
SOFTWARE GROUP

MAX IV

Project: Archiving Upgrade (HDB++)

- Migration from Cassandra to TimeScaleDB
- Monitoring Web Tool - archwizard
- Configuration Scripts – yaml2archiving
- New Archive Viewer



Collaborations

- Tango, PyTango
- Taranta
- Sardana and Taurus
- MXCuBE and ISPyB
- HDB++
- SciCat

Recap

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Highlights

- Tango Distribution, Benjamin Bertrand
- News from the HDB++ project, Johan Forsberg
- PyTango Status Report, Anton Joubert
- CI/CD at MAX IV, Benjamin Bertrand
- Taranta Status report, Matteo Canzari
- Solaris Stategrid Web Migration, Joanna Wajda