## Tech Workshop: Mastering Open Source Monitoring for Robust Hardware and Data Solutions

Tuesday 12 December 2023 - Tuesday 12 December 2023 Gebäude 28c, 2.OG

## **Scientific Programme**

Developers of a multi-platform open-source network management system - NetXMS - are invited to give a workshop. This will be divided into 2 parts: presentation (covers UX and requirements capture in case of a big amount of hardware) and implementation (covers software development issues).

They will also share their knowledge of hardware monitoring and data acquisition, of how to effectively support open source projects for more than 15 years, to create beneficial and easy development pipelines, to provide security in open-source solutions, to deploy in a different hardware variations and share their software development approaches and answer our questions as they are working in the same field.

First part might be of the most interest for beamline managers, beamline scientists and DESYer doing software development.

The second part is more related to software itself and might be beneficial for software engineers and IT related developers.

Speakers are professional IT project managers and software engineers. They will cover topics of:

Monitoring of network devices, servers and applications from one management server

Data collection from SNMP-capable platforms

Configuration, administration and monitoring functions via multiplatform (Eclipse-based) and Web GUIs

Ability to send e-mails and SMS notifications or execute external programs as a reaction to any event

Organization of monitored objects into hierarchical structure to represent service dependencies

Centralized remote observability agent upgrades

OSI Layer 2 and Layer 3 IP topology automatic discovery

Portable client libraries

Flexible policy-based event processing (including correlation rules)

Remote access

Flexible access control configuration

Infrastructure usage (services, optimal usage of central IT capabilities)

Community/user needs and expectations, including ones that are not currently met

Built-in scripting engines for advanced automation and management