

Session 1. Cyber security, facility equipment maintenance and tools

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Abstract

1a. Cyber attack preventing and preparation - Gabriel Krens (15 + 5 min) - presentation

What to do when your institute is a victim from a cyber attack? What are the consequences for a facility? What can I do to improve cyber security and/or prepare for a cyber attack? These are just a few questions that might be triggered when reading the title of this session.

A recent cyber attack impaired all facility services and required the re-installation of all instrumentation of our elaborate machine park consisting of advanced imaging systems; cytometers as well as image analysis infrastructure. This session aims to raise awareness of what the impact of cyber criminality can have on your organization and share some tips that can be done to be prepared in case drama strikes. Based on the outcome of an earlier sent out Cyber Security Questionnaire, we highlight some considerations that might be helpful to be prepared, prevent & prevail. What is there to consider to establish your checklists - or cyber-security recovery plan - to speed up recovery more efficiently when drama strikes.

1b. Toolkits for Equipment maintenance custom applications (Roland + Stefan + Gabriel)

The imaging and optics community consists of many creative minds, problem solvers and inventors. Often, creativity is inspired by problems and limitations encountered in a local work environment. This driving force has led to the creation of a plethora of solutions for quality control, as well as hardware & software tools, that interest others.

i. Short update QUAREP-LiMi (15 min) Roland Nitschke

A community-wide initiative for Quality Control and Quality Monitoring (QUAREP-LiMi) now provides a central platform to join efforts. A progress update will be provided.

ii. Facility tools presentation (10 min talks + 5 min questions) Gabriel Krens

In addition to quality control, many inventions, optical tools and software solutions are developed in house that are easy to use, reproduce and can significantly contribute to the field. We share a small selection of inventions in a brief overview of some of these community-driven tools.

- **Multi-USB dongle gadget, license management, IT maintenance** - [Tobias Wernet](#) (LIC Freiburg)
- **Maintenance Tools for Facilities** - [Robert Hauschild](#) (IOF/ISTA)

iii. MicroscopyDB.io/Tools on <https://elmi.embl.org/tools> (10 minutes) □ Stefan Terjung

As more tools are created and shared with the community via different platforms (Git, fora, websites etc.), finding the problem-solving tools you require is becoming more difficult. Using a recently initiated centralized database for Jobs, Conferences and Development resources (MicroscopeDB.io), we present and launch a new category "TOOLS" on this platform to simplify searches of existing TOOLS, as well as central sharing possibilities of all community-driven hardware and software TOOLS.

Tool Submissions: * Sample flipper (Robert Hauschild - IOF/ISTA) * 3D printed Zeiss calibration objective holder (Robert Hauschild - IOF/ISTA) * CARE-less: Jupiter toolbox for ML applications (Christoph Sommer - IOF/ISTA) * Automated light power measurement (Nasser Darwish, Arne Fallisch - QUAREP-LiMi) * LIC Workstation Status Tool (Tobias Wernet - LIC Freiburg) *

