

Laser Control System Workshop

Report of Contributions

Contribution ID: 1

Type: **not specified**

High-resolution wavemeter calibration at Mainz

Friday 21 September 2018 14:15 (10 minutes)

High-resolution study of a high-precision wavemeter has been done in Mainz. The reproducibility of the calibration is a striking feature.

Presenter: NOERTERSHAEUSER, Wilfried (University Mainz)

Session Classification: Wavelength measurement and control

Contribution ID: 2

Type: **not specified**

Laser frequency determination and stabilisation at IGISOL

Friday 21 September 2018 14:25 (10 minutes)

Presenter: GELDHOF, Sarina (University of Jyvaskyla (FI))

Session Classification: Wavelength measurement and control

Contribution ID: 3

Type: **not specified**

Problems and solutions for accurate laser control at Helios and RILIS

Friday 21 September 2018 14:35 (10 minutes)

The frequency spectrum of the dye laser amplifier in the Helios laboratory in IKS, KU Leuven, has been observed to contain sidebands of the main laser frequency. Multiple orders of these sidebands have been seen and have an offset of about 800 MHz from one another. The origin of this problem and some solutions have been investigated.

Once the output of the laser light is a pure single mode, remote and hands-off operation of the laser system will prove to be very useful. Therefore, an accurate and absolute control of the laser selective elements will be necessary. Tests have been performed at RILIS, CERN, using etalon mounts with absolute positioning.

Presenter: Mr DOCKX, Kristof (KU Leuven (BE))

Session Classification: Wavelength measurement and control

Contribution ID: 4

Type: **not specified**

Trap CS

Friday 21 September 2018 15:00 (10 minutes)

The Penning Trap community pooled their resources together and created a Trap CS with frequent updates and full support in Europe and North America.

Its concept and current status will be introduced as an example of what a laser control system could, as well as how it was attempted to apply this CS to some laser spectroscopy experiment (TRIGA).

Presenter: NEIDHERR, Dennis (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE))

Session Classification: Laser Control System

Contribution ID: 5

Type: **not specified**

EPICS: an integrated control system

Friday 21 September 2018 15:10 (10 minutes)

At the accelerator laboratory in Jyväskylä, both the Penning Trap and Collinear Laser Spectroscopy systems are globally integrated into the facility's control system, EPICS. It will be briefly presented.

Presenter: REPONEN, Mikael (University of Jyväskylä)

Session Classification: Laser Control System

Contribution ID: 6

Type: **not specified**

CRISTAL: a distributed control and acquisition system

Friday 21 September 2018 15:20 (10 minutes)

At the CRIS experiment at ISOLDE, a Python-based distributed control and acquisition system has been developed that allows for fast expansion of any new device and feature. It will be briefly presented.

Presenter: DE GROOTE, Ruben Pieter (University of Jyvaskyla (FI))

Session Classification: Laser Control System

Contribution ID: 7

Type: **not specified**

Intro

Friday 21 September 2018 14:00 (5 minutes)

Introduction to the workshop and the recent survey of the community

Presenter: Prof. COCOLIOS, Thomas Elias (KU Leuven - IKS)

Session Classification: Intro

Contribution ID: 8

Type: **not specified**

ATOS vs HighFinesse

Friday 21 September 2018 14:45 (5 minutes)

From the latest Bi run at CERN

Presenter: SELIVERSTOV, Maxim (Petersburg Nuclear Physics Institut (RU))

Session Classification: Wavelength measurement and control