Contribution ID: **71** Type: **Talk**

Analysis of High-Intensity Proton Accelerator Availability over the Last 15 Years of Operation at PSI

Friday, October 20, 2017 9:00 AM (30 minutes)

Paul Scherrer Institut (PSI) is home to cyclotron-based high intensity proton accelerator facility HIPA, which presently delivers a maximum of 1.4 MW beam power. Detailed analysis on unexpected outages due to various failures is presented and how the failure rate of each subsystem evolved over the years. Main severe events (interlocks malfunction, vacuum, discharge problems, failures of cavities, magnets, power supplies and targets) impacting the availability for each year are revealed, compared and discussed. These findings serve to a better understanding and further possible optimizations of operation and maintenance in order to keep high reliability and availability above 90% for the users of the HIPA facility.

Primary author: Dr PARFENOVA, Angelina (PSI)

Presenter: Dr PARFENOVA, Angelina (PSI)

Session Classification: 16- High Intensity Beam Reliability

Track Classification: High Intensity Accelerator Reliability