

Contribution ID: 184 Contribution code: WEP28

Type: Poster Presentation

Experience with PSI's Main Ring Cyclotron Long Radial Probe

Wednesday, 11 September 2024 14:20 (1h 30m)

A Long Radial Probe is a device that measures the transverse beam profile in a cyclotron along its radius. The current iteration of the probe was installed in the PSI Main Ring Cyclotron in 2022. After a successful start, the probe suffered from a strong coupling to RF-fields leaking from the cavities and breaking the carbon fibres. A series of measures were attempted and produced ambivalent outcomes. This paper describes the challenges and presents the experiments and thermal calculations which led to solving the RF-heating issue.

Footnotes

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

Primary author: Dr SAPINSKI, Mariusz (Paul Scherrer Institut)

Co-authors: ROHRER, Martin (Paul Scherrer Institut); MARTINIE, Rémi (Paul Scherrer Institut); LINDNER,

Simon (Paul Scherrer Institut)

Presenter: Dr SAPINSKI, Mariusz (Paul Scherrer Institut)

Session Classification: WEP: Wednesday Poster Session

Track Classification: MC4: Transverse Profile and Emittance Monitors