

Session Program

29-30 May 2024

ICEC - CERN Project STELLA Kick-off Meeting “Re-engineering the Next Generation of Medical Linear Accelerators for Use in Challenging Environments”

Session 5

CERN, 40/S2-B01 - Salle Bohr

Wednesday 29 May

15:20

Session 5: Software

Session | **Location:** CERN, 40/S2-B01 - Salle Bohr | **Convener:** Rajesh Jena

15:20–15:30 Overview and Key Challenges

Speaker

Rajesh Jena

15:30–15:42 Cascaded Machine Learning and Transformer Models

Speaker

Xin Du

15:45–15:57

State-of-the-Art in Federated Learning and Development of CERN's CAFEIN Platform for STELLA

Speakers

Diogo Reis Santos, Luigi Serio

16:00–16:12 Background to the Capture of Fault Data from UK Linac Stock

Speaker

Joseph Bateman

16:15–16:27

Modelling, Learning From, and Predicting Fault Patterns in Linac Hardware

Speaker

Sam Leadley

16:30–16:42

Requirements Capture to Speed Up Medical Device Certification and Route to Market

Speaker

Bob Spears

16:45–16:50 Session Summary and Next Steps

Speaker

Rajesh Jena

16:50