

Contribution ID: 526 Contribution code: WEPS57 Type: Poster Presentation

Plasma processing on C75 cavities in Jefferson Lab

Wednesday, 22 May 2024 16:00 (2 hours)

Plasma processing has shown to be an effective tool for removing hydrocarbons built up during the operation of the superconducting cavities. Motivated by the 49 MeV operational energy gain of the four C100 cryomodules at Jefferson Lab, there is an ongoing experimental and simulation study of plasma processing on the C75 cavities. The simulation work is focused on the dynamics of the gas, plasma ignition, and control. In parallel, a program to plasma process C75 cavity pairs and cryomodules is in progress. The recent progress report will be presented in this proceedings.

Footnotes

Funding Agency

This work is supported by SC Nuclear Physics Program through DOE SC Lab funding announcement Lab-20-2310 and by the U.S. Department of Energy, Office of Science, Office of Nuclear Physics under contra

Paper preparation format

Region represented

North America

Primary author: RAUT, Nabin (Thomas Jefferson National Accelerator Facility)

Co-authors: GANEY, Tiffany (Thomas Jefferson National Accelerator Facility); POWERS, Tom (Thomas Jefferson National Accelerator Facility)

Presenter: RAUT, Nabin (Thomas Jefferson National Accelerator Facility)

Session Classification: Wednesday Poster Session

Track Classification: MC7: Accelerator Technology and Sustainability: MC7.T07 Superconducting

RF