



Contribution ID: 2082 Contribution code: SUPG069

Type: Student Poster Presentation

New design techniques on matching couplers for travelling wave accelerating structures

Sunday, 19 May 2024 14:00 (4 hours)

Numerical optimizations on couplers of the traveling wave accelerating structures usually require lots of calculation resources. This paper proposes a new technique for matching couplers to an accelerating structure in a more efficient way. It combines conventional Kroll method with improved Kyhl method, thereby simplifying the tuning and simulation process. We will present the detailed design of a constant-gradient C-band accelerating structure based on this new method.

Footnotes

Funding Agency

This work is supported by the “Hundred Talents Program” of the Chinese Academy of Sciences and by the “Fundamental Research Funds for the Central Universities”.

Paper preparation format

Region represented

Asia

Primary author: HUANG, Zhicheng (University of Science and Technology of China)

Co-authors: SUN, Li (University of Science and Technology of China); WEI, Yelong (University of Science and Technology of China); CAO, Zexin (University of Science and Technology of China)

Presenter: CAO, Zexin (University of Science and Technology of China)

Session Classification: Student Poster Session

Track Classification: MC7: Accelerator Technology and Sustainability: MC7.T06 Room Temperature RF