



Contribution ID: 1505 Contribution code: TUPM003

Type: **Poster Presentation**

## Optimizing coupling slot design for pi-mode structure cavity in CSNS II debuncher

*Tuesday, 9 May 2023 16:30 (2 hours)*

This paper proposes a new coupling slots design for the Pi-Mode structure high-frequency cavity in the China Spallation Neutron Source (CSNS) Phase II. Through simulation calculations and experimental verification, it was found that the new coupling slots design significantly improves the Q value and transmission efficiency of the high-frequency cavity. This study is of great significance for improving the performance of the high-frequency cavity in CSNS II, and thus improving the accuracy and efficiency of neutron scattering experiments.

### Funding Agency

### Footnotes

### I have read and accept the Privacy Policy Statement

Yes

**Primary author:** YANG, Yao (University of Chinese Academy of Sciences)

**Co-authors:** LI, Ahong (Institute of High Energy Physics); LIU, Huachang (Institute of High Energy Physics); QU, Pei Hua (Institute of High Energy Physics)

**Presenter:** YANG, Yao (University of Chinese Academy of Sciences)

**Session Classification:** Tuesday Poster Session

**Track Classification:** MC4: Hadron Accelerators: MC4.A08: Linear Accelerators