

## 22ND INTERNATIONAL CONFERENCE ON RF SUPERCONDUCTIVITY

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# The RF power source systems of CSNS-II Linac RF superconducting cavities

Thursday 25 September 2025 14:30 (3 hours)

The CSNS-II superconducting Linac accelerator includes 20 sets of 324 MHz superconducting spoke cavities and 24 sets of 648 MHz superconducting ellipsoidal cavities. The 324 MHz/300 kW solid-state power source supplies RF power to superconducting spoke cavity, while the 648 MHz/1.2 MW klystron power source supplies RF power to superconducting ellipsoid cavity. The 324 MHz/300 kW solid-state power source uses GaN amplifier tubes and is composed of two cabinets. The long-pulse solid-state modulator supplies pulsed high voltage to the 648 MHz/1.2 MW klystron. The RF pulse width is 1.2 ms, the repetition rate is 50 Hz.

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Yes

#### **Footnotes**

### **Funding Agency**

Author: MU, Zhencheng (Institute of High Energy Physics)

**Co-authors:** Mr WANG, Hexin (Institute of High Energy Physics); Mr ZHANG, Hui (Institute of High Energy Physics); Ms RONG, Linyan (Institute of High Energy Physics); Mr WAN, Maliang (Institute of High Energy Physics); Mr XIE, Zhexin (Institute of High Energy Physics); Mr WANG, bo (Institute of High Energy Physics);

Physics)

**Presenter:** MU, Zhencheng (Institute of High Energy Physics)

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