**CEPC RF power source development status**

Zusheng Zhou

The CEPC collider beam power is about 60MW, so the efficiency of RF sources is crucial for the project to be cost effective. The high power klystron is more attractive power source because of its potential for higher eﬃciency than other amplifiers. IHEP is developing 650MHz klystron with 800kW CW output power and 80% efficiency. To achieve this goal, a couple of klystron prototypes are being manufactured presently. The first prototype has been completely developed in 2020 with traditional bunching method with the efficiency reaching up to 62%. The high efficiency prototype has also been completely manufactured at the end of 2021 with design of output power and efficiency to be 800kW and 75% respectively. High power conditioning and test for prototype is in progress, current status is with 67.8% efficiency and 547kW CW power. Moreover, a multi-beam klystron prototype is being developed with designed efficacy of higher than 80%. The design schemes of high efficiency klystron with other methods are also in progress. The design of C-Band 80MW klystron for Linac has already started.