



Contribution ID: 357

Type: **Oral presentation using Zoom**

High Efficiency Klystrons development.

Thursday, 28 October 2021 16:30 (25 minutes)

The increase in efficiency of RF power generation for the future large-scale accelerators such as CLIC, ILC, FCC, CEPC and others is considered as a high priority issue. The vast majority of existing commercial high RF power klystrons operates in the electronic efficiency range between 40% and 50%. Only a few klystrons available on the market are capable of operating with 65% efficiency or above. Since 2014, a thorough High Efficiency (HE) klystron development program was established at CERN. Specialized computer tools, different bunching technologies and klystron topologies were studied and established since then and used for the development of different HE klystrons. We will report on the HE klystron development status and CERN, and present a potential candidate of the HE (85%) 10 MW L-band klystron for ILC.

1st preferred time slot for your oral presentation

15:30-17:30 JST (8:30-10:30 CEST, 2:30-4:30 EDT, 23:30-1:30 PDT)

2nd preferred time slot for your oral presentation

19:00-21:00 JST (12:00-14:00 CEST, 6:00-8:00 EDT, 3:00-5:00 PDT)

Primary author: SYRATCHEV, Igor (CERN)

Presenter: SYRATCHEV, Igor (CERN)

Session Classification: W-2: Green ILC

Track Classification: Parallel sessions: Sustainability: Session W: Green ILC