Contribution ID: **292** Type: **Oral talk (15 min + 5 min questions)**

ALGORITHMS FOR DESIGNING POWERFUL MULTICAVITY KLYSTRONS

Friday, 15 July 2022 18:10 (20 minutes)

The Super S-tau Factory project [1], carried out by the Institute of Nuclear Physics of the Siberian Branch of the Russian Academy of Sciences, makes the development of a 50-megawatt S-band klystron especially topical. The paper describes the algorithms for calculating and designing such a klystron, as well as the characteristics of the program created for this purpose. Comparisons of the results obtained by this program with the results of calculations using the CST Microwave Studio are given.
Algorithms for designing individual elements and assemblies of advanced multi-beam klystrons and sheet-beam klystrons (electron guns, cavities etc/) based on the boundary element method are described in the author's monograph [2].

1. https://ctd.inp.nsk.su/c-tau/.
2. V. Ivanov. Computational methods, optimization and synthesis in electron optics. - Hmbg: Palmarium Academic Publishing, 2016. -525 pp.

The speaker is a student or young scientist

No

Section

1. Design and development of charged particle accelerators and ionizing radiation sources

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Session Classification: Design and development of charged particle accelerators and ionizing radiation sources