## **Channeling 2018**



Contribution ID: 26 Type: Poster

## Injector Linac Prototype of the Russian 4th Generation Specialized Synchrotron Radiation Source SSRS-4 as a Possible Compact XFEL

Thursday, 27 September 2018 18:40 (1 hour)

In this report we present first results of the design of the compact XFEL based on prototype of new linacinjector. This linac develops for the one of the largest Russian scientific projects, 6 GeV 4-th generation light source SSRS4. Both synchrotron and XFEL based on top-up injection linac are proposed to construct in SSRS4 complex. Suggested prototype of the injector initially will include 10 MeV RF photo-gun and 50 MeV regular section. The report summarizes the results of preliminary research of SSRS4 linac injector prototype general layout and it's parameters. The possibility of future use of the prototype as a compact light-source will also discuss.

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Session Classification: PS3 - Poster session