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## The Design of ITRIP and Progress of Experimental Setup

*Thursday, 23 September 2021 08:00 (20 minutes)*

Highly charged ion sources play an important role in the advancement of heavy-ion accelerators worldwide. Driven by the needs of 100  $\mu$ s to ms pulsed highly-charged heavy ions for new and existing accelerators, the conceptual design of an Ion Trap for high-Intensity Pulsed beams (ITRIP) was proposed and the proof of principle test has been taken at IMP. The ITRIP is designed to accumulate and convert a CW ion beam into a high-intensity short-pulsed ion beam with suitable compression ratios. Preliminary simulations have been performed and promising results have been obtained. To validate this idea, a test bench has been set up. This paper will present the design of ITRIP. The proof of principle setup as well as the preliminary test results will be specially discussed.

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