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## Short pulse enhancement at the Proton storage ring via double stacking for the Lujan Center at LANSCE

*Monday 8 May 2023 16:30 (2 hours)*

The Proton Storage Ring (PSR) of LANSCE compresses the pulse of a linac-produced beam by a factor of more than 2000 into an ultra-short high intensity beam, making the Lujan Center a leading facilities in the delivery of instantaneous beam power. This short-pulse feature allows a variety of experiments from neutron science to fundamental nuclear physics. Further shortening the beam pulse by another factor of 2 is necessary to achieve high-resolution nuclear data the search for Beyond Standard Model particles. We will report on our current status in our research to simultaneously stack two shorter pulses into the PSR by repurposing existing components in a system that, unlike synchrotrons, has limited flexibility.

### Funding Agency

### Footnotes

### I have read and accept the Privacy Policy Statement

Yes

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