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Future Physics Opportunities at the Oak Ridge National Laboratory Spallation Neutron Source

Thursday, 23 March 2023 13:50 (5 minutes)

The Oak Ridge National Laboratory (ORNL) Spallation Neutron Source (SNS) First Target Station (FTS), used by the COHERENT experiment, provides an intense and extremely high-quality source of pulsed stopped-pion neutrinos, with energies up to about 50-MeV. Upgrades to the SNS are underway, including a Second Target Station (STS) in the early 2030's, which will approximately double the source power while maintaining neutrino spectral quality similar to the FTS source. Furthermore, additional space for ten-tonne scale detectors may be available.

We highlight exciting opportunities for neutrino physics, other particle and nuclear physics, as well as detector development, for the FTS and STS neutrino sources in the next decade.

Please select if remarks will be in person or on zoom

On zoom

Do you describe your self as early career?

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COHERENT

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Session Classification: Open Session for remarks