

# **SNS BLM SYSTEM OVERVIEW: DETECTORS, MEASUREMENTS, SIMULATIONS**

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## **Abstract**

SNS is a 1.5 MW hadron beam facility; so the Beam Loss Monitor (BLM) system is a crucial part of MPS and an important tool for beam tuning. We have installed a number of Neutron Detectors (ND), Ionization Chambers and Photo-Multiplier Tubes (PMT) along the SNS beamline. In this paper we present the current status of equipment installed and experimental data obtained during SNS commissioning and operations. We compare several different types of BLMs and show advantages and disadvantages of every type. The losses are simulated by 3-D transport codes (GEANT4, SHIELD) for different loss scenarios and compared with experimental data. Also we discuss equipment issues like part obsolescence and our vision of next generation BLM system.

**CONTRIBUTION NOT  
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