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An approachable beam loss monitor configuration and operation tool for FRIB

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The folded LINAC beamline at FRIB presents many challenges to effectively utilizing beam loss monitors (BLMs) for machine protection. Several dozens of ion chambers and neutron detectors are installed at various locations, and must have machine protection thresholds configured to meet requirements for an array of beam destinations, ion species, energies, and beam power. This presents a large number of variables to account for, and each detector needs to be handled differently given its unique position in the beamline. A tool is presented which approaches the management of these variables and sets BLM thresholds in a largely automated way that requires very little operational time or training to set up.

Footnotes

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