

Abstract Submitted
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The Neutron Emission Ratio Observer NERO at the National Superconducting Cyclotron Laboratory JORGE PEREIRA, PAUL HOSMER, GIUSEPPE LORUSSO, PETER SANTI, MARCELO DEL SANTO, National Superconducting Cyclotron Laboratory, Michigan State Univ. MI, US, CLEMENS HERLITZIUS, Max Planck Institut fuer Chemie, Universitat Mainz, Germany, KARL-LUDWIG KRATZ, FERNANDO MONTES, HENDRIK SCHATZ, National Superconducting Cyclotron Laboratory, Michigan State Univ. MI, US, FLORIAN SCHERTZ, Max Planck Institut fuer Chemie, Universitat Mainz, Germany, LINDA SCHNORRENBERGER, Institut fuer Kernphysik, Technische Universitat Darmstadt, Darmstadt, Germany, KARL SMITH, National Superconducting Cyclotron Laboratory, Michigan State Univ. MI, US, MICHAEL WIESCHER, Institute of Structure and Nuclear Astrophysics, Univ. Notre Dame, IN, US — The new neutron counter NERO (Neutron Emission Ratio Observer) was built at the National Superconducting Cyclotron Laboratory (NSCL) for measuring P_n values of neutron-rich nuclei produced as fast fragmentation beams. The design was motivated by the requirement of being coupled to the NSCL beta counting system, so that β -decay particles and neutrons emitted from implanted nuclei can be measured simultaneously, while keeping a high efficiency. The detector's performance and main features will be discussed, as well as recent measurements done at NSCL for astrophysical studies of the r-process.

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