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The Influence of Neutron Capture Rates in the Rare Earth Region on the r-Process MATTHEW MUMPOWER, GAIL MCLAUGHLIN, North Carolina State University, REBECCA SURMAN, Union College — The r-process has long been known to be an integral component of heavy element nucleosynthesis. We study the sensitivity of the r-process to neutron capture rates along the rare earth peak. We identify important neutron capture rates in this region and show how these rates influence specific sectors of the abundance pattern.

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