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Rare Isotopes At Your Fingertips: a game for introducing students to nuclear science ZACHARY CONSTAN, National Superconducting Cyclotron Laboratory, BRIAN WINN, ANDREW DENNIS, Michigan State University, CHRIS WREDE, REMCO ZEGERS, HENDRIK SCHATZ, ALEX BROWN, National Superconducting Cyclotron Laboratory, NICHOLAS THURSTON, CHRISTOPHER BENOIT, SAHIL TANDON, WILLIAM JEF-FERY, TYLER SUMMERS, ANDREW BAGDADY, PETER BURROUGHS, JOSEPH DYKSTRA, JOSHUA SHADIK, AMANDA KRUEGER, Michigan State University, MICHAEL BOWRY, CHARLES LOELIUS, MICHAEL BENNETT, National Superconducting Cyclotron Laboratory — Two units at Michigan State University, the Games for Entertainment and Learning (GEL) Lab and National Superconducting Cyclotron Laboratory (NSCL), are developing a touch-based digital game for physics outreach. Players will be able to explore the chart of the nuclides, accelerate stable nuclei, fragment them on a target, and handcraft rare isotopes from the excited protons and neutrons. Gameplay will lead them to the discovery of new isotopes, highlighting stability/instability, nucleosynthesis, radioactive decay, etc. The goal of this game is to bring an awareness and appreciation of nuclear science to a broader audience. Future funding sources will be used to further develop the game into a tool for the classroom, where students will learn about potential career paths in nuclear research.

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