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Single-crystal diamond detectors for swift heavy ion beams ANDREAS STOLZ, NSCL / Michigan State University, AYAN BHATTACHARYA, TIMOTHY A. GROTJOHN, Department of Electrical & Computer Engineering, Michigan State University, JOHN YURKON, NSCL / Michigan State University — The outstanding properties of diamond allow the development of particle detectors with very fast detector response and excellent radiation hardness. Detectors based on diamonds produced by chemical vapor deposition have been developed at Michigan State University. The performance of these detectors were studied at the National Superconducting Cyclotron Laboratory. First results of the investigation of the radiation tolerance of diamond detectors under the irradiation of swift heavy ions in the energy range of 100-150 MeV/u will be presented.

Andreas Stolz NSCL / Michigan State University

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