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Sub-barrier Fusion of radioactive ¹³²Sn and ⁶⁴Ni¹ J.F. LIANG, D. SHAPIRA, C.J. GROSS, R.L. VARNER, J.R. BEENE, P.E. MUELLER, D.W. STRACENER, Physics Division, Oak Ridge National Lab — Fusion induced by neutron-rich radioactive ion beams has received substantial interest experimentally and theoretically in recent years. The fusion excitation function of radioactive ¹³²Sn on ⁶⁴Ni has been measured. The cross section for the lowest energy data point had a large uncertainty and was anomalously large. With an improved apparatus, an experiment was carried out to investigate the fusion of ¹³²Sn and ⁶⁴Ni at sub-barrier energies. The technique and results of the new measurement will be presented.

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J.F. Liang Physics Division, Oak Ridge National Lab

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