

Abstract Submitted  
for the APR18 Meeting of  
The American Physical Society

**Outburst Observations of the Black Hole MAXI J1535-571** JOEY NEILSEN, Villanova Univ, ED CACKETT, Wayne State University, ANDY FABIAN, Cambridge University, KEITH GENDREAU, Goddard Space Flight Center, JEROEN HOMAN, Eureka Scientific, JON MILLER, None, DJ PASHAM, RON REMILLARD, JACK STEINER, MIT, PHIL UTTLEY, University of Amsterdam — Accreting or feeding stellar mass black holes are among the most exotic and powerful sources of energy in the universe: as a result of their small sizes and deep gravitational potentials, these systems can vary on timescales as short as milliseconds, even as they launch relativistic jets and ionized winds, outshine stars by orders of magnitude, and provide testbeds for some of General Relativity’s most exciting predictions. They are excellent targets for NICER’s sensitive X-ray capabilities. In this talk, I will describe our analysis of the recent outburst of a new black hole candidate, MAXI J1535-571, highlighting some results on fast and slow variability as well as new constraints on the accretion disk from a coordinated campaign with the hard X-ray telescope NuSTAR. These results clearly illustrate how much NICER has to contribute to our understanding of black hole astrophysics.

Joey Neilsen  
Villanova Univ

Date submitted: 15 Feb 2018

Electronic form version 1.4