Abstract Submitted
for the MAR13 Meeting of
The American Physical Society

Performance analysis of an inexpensive Direct Imaging Transmission Ion Microscope PATRICK BARNES, ARTHUR PALLONE[1], Norwich University — A direct imaging transmission ion microscope (DITIM) is built from a modified webcam and a commercially available polonium-210 antistatic device mounted on an optics rail. The performance of the DITIM in radiographic mode is analyzed in terms of the line spread function (LSF) and modulation transfer function (MTF) for an opaque edge. Limitations of, potential uses for, and suggested improvements to the DITIM are also discussed.

[1]faculty sponsor

Arthur Pallone
Norwich University

Date submitted: 09 Nov 2012 Electronic form version 1.4