



5-10 January 2007, Seattle, WA

 [Print this Page for Your Records](#)

[Close Window](#)

Control/Tracking Number: 07-RC-1079-AAS209

Activity: Research Contributed

Current Date/Time: 10/16/2006 2:15:57 PM

Circles on the Sky: Confirmation of a Light Echo from the Type Ia Supernova 1995E

Author Block: Peter M. Garnavich¹, J. L. Quinn², K. Krisciunas¹

¹Univ. of Notre Dame, ²Central Michigan University.

Abstract: We show that the resolved source coincident with the position of SN 1995E in NGC 2441 is an expanding light echo. This is only the third confirmed light echo from a well-observed type Ia supernova, the others being SN 1991T and SN 1998bu. The echo candidate was first identified from a 2001 Hubble Space Telescope (HST) "snap-shot" survey of fields containing type Ia events (Quinn et al.). Follow-up HST/ACS images obtained in September 2006 reveal that the source is now a small ring and its size has increased by about 30% over the 2001 STIS image. This is expected for light scattering off a dust sheet 200 pc in front of the supernova. We analyze the echo color to constrain the properties of dust in NGC 2441.

This work is partially supported by NASA grant HST-GO-10892.

:

Category (Complete): 10. Cataclysmic Variables, Novae, Supernovae, Wolf-Rayet Phenomena

Facility Keywords (Complete): HST(ACS)

Presentation Preference (Complete): Poster

Special/Topical Sessions (Complete):

Additional Info. (Complete):

I am willing to serve as a Chair: : Yes

(1) Area of Expertise: : 10. Cataclysmic Variables, Novae, Supernovae, Wolf-Rayet Phenomena

(2) Area of Expertise: : 22. Cosmology, Early Universe, Cosmic Distance Scale

(3) Area of Expertise: : 7. Binary Stars, Variable Stars

Newsworthy? : Yes

Status: Complete

Powered by [OASIS](#), The Online Abstract Submission and Invitation System SM
 © 1996 - 2006 [Coe-Truman Technologies, Inc.](#) All rights reserved.

