Abstract Submitted
for the APR21 Meeting of
The American Physical Society

Radio observations confirm rebrightening of SN2004dk ARVIND BALASUBRAMANIAN, DR. ALESSANDRA CORSI, Texas Tech University, DR. TRACY CLARKE, DR. NAMIR KASSIM, DR. EMIL POLISENSKY, Naval Research Laboratory — The study of core collapse supernovae (SNe) provides insights into the physics of such explosions in multiple ways. In particular, radio observations of the SN ejecta can help provide clues about the mass loss history of the progenitor. SN2004dk, a Type Ibc supernova, was first observed in August 2004. $\tilde{1}5$ years later, radio observations with both the Very Large Array Low Band Ionosphere and Transient Experiment (VLITE) and the Jansky Very Large Array (VLA), confirm a rebrightening accompanied by H-α emission. This points to a progenitor that emitted its H-rich shell $<$ 1000 years before the explosion. Here, we discuss our VLITE/VLA observations and conclusions.

Arvind Balasubramanian
Texas Tech Univ

Date submitted: 08 Jan 2021 Electronic form version 1.4