

Abstract Submitted  
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**Accretion-Induced Collapse of White Dwarfs** ERNAZAR ABDIKAMALOV, CCT LSU, CHRISTIAN OTT, California Institute of Technology, LUCIANO REZZOLLA, Albert Einstein Institute, LUC DESSART, Laboratoire d'Astrophysique de Marseille, HARALD DIMMELMEIER, ANDREAS MAREK, Max Planck Institute for Astrophysics, HANS-THOMAS JANKA, Max Planck Institute for Astrophysics — The accretion-induced collapse (AIC) of a white dwarf may lead to the formation of a protoneutron star and a supernova explosion. This process represents a path alternative to thermonuclear disruption of accreting white dwarfs in Type Ia supernovae. In the AIC scenario, the supernova explosion energy is expected to be small and the resulting transient short-lived, making it hard to detect by electromagnetic and neutrino means alone. Gravitational-wave observations may provide crucial information necessary to reveal a potential AIC. In this talk, I present results from recent numerical simulations of AIC. I will discuss the prospects for observing electromagnetic and gravitational wave signal from AIC.

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