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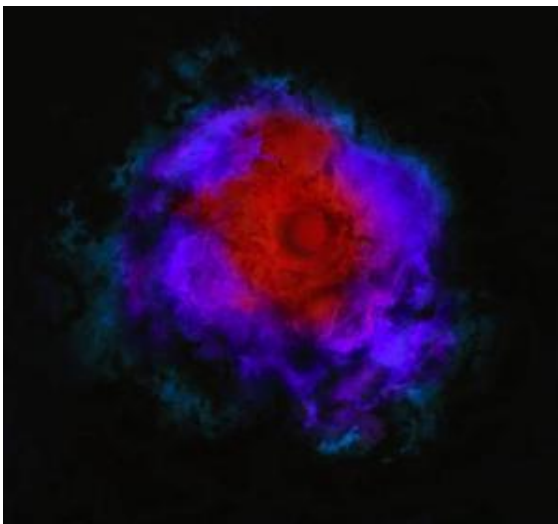
LOCATION: A601 NAOC

The Dark Matter Stars

Prof. Paolo Gondolo

University of Utah

Dr. Paolo Gondolo is currently a professor of Department of Physics & Astronomy, the University of Utah. He works at the interface of cosmology, astrophysics, and high energy physics. His main current interests are the nature of dark matter and dark energy, and high-energy cosmic neutrinos.



Abstract

Dark matter star is a new phase of the stellar evolution during the formation of first generation stars. Collapse of gas would attract dark matter to collapse together and form a high density core. Self-annihilation of dark matter particles would inject energy into the gas inside the core, which heats the gas core and prevents further collapse of the gas to initiate nuclear fusion. Dark matter stars are typically massive ($500\text{-}1000 M_{\text{sun}}$), large and have low temperature ($< 10000 \text{ K}$).

All are welcome! Tea, coffee, biscuits will be served at 3:30 P.M.

You are welcome to nominate speakers to Shude Mao (shude.mao@gmail.com), Licai Deng (licai@bao.ac.cn), Xuelei Chen (xuelei@cosmology.bao.ac.cn).