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Compact and extended objects from self-interacting phantom fields JOHN SCOTT, DOUGLAS SINGLETON, California State University, Fresno, VLADIMIR DZHUNUSHALIEV, Dept. Theor. and Nucl. Phys., KazNU, VLADIMIR FOLOMEEV, Institute of Physicotechnical Problems and Material Science of the NAS of the Kyrgyz Republic, ARISLAN MAKHMUDOV, Peoples Friendship University of Russia, AINUR URAZALINA, Dept. Theor. and Nucl. Phys., KazNU — In this talk we discuss localized and extended objects for gravitating, self-interacting phantom fields. The phantom fields come from two scalar fields with a “wrong sign” kinetic energy term in the Lagrangian. This study covers several solutions supported by these phantom fields: phantom balls, traversable wormholes, phantom cosmic strings, and “phantom” domain walls. We will focus mostly on the wormhole solutions.

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