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## **Long-term evolution of core-collapse supernova asymmetries from shock revival to shock breakout**

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Over the past decade remarkable progress has been made in simulating long-term evolution of core-collapse supernova explosions in three dimensions. Current state-of-the-art simulations are able to follow the non-radial asymmetries fostered by the growth of hydrodynamic instabilities from the shock revival phase until the blastwave disrupts the entire progenitor stars. These simulation results will be the Rosetta stone that connects observations of supernovae and supernova remnants to the theory of explosion mechanism.