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Title: The origin of multiphase galaxy outflows

Abstract: Star-forming galaxies are often observed to have galactic winds - gas that is being ejected from the disk in phases ranging from cold molecular clouds to hot X-ray emitting plasma. While these multiphase outflows are routinely observed, theoretically constraining their origin has proven difficult. Explaining the prevalence and velocities of the cool ionized phase ( $T \sim 10^4$  K) in particular poses a challenge. In this talk, I will discuss a potential dual origin for this cool gas. Through a series of extremely high-resolution simulations run with the GPU-based *Cholla* code, I will show that in high star formation surface density systems, dense disk gas can be pushed out by the collective effect of supernovae, explaining the low-velocity material. Simultaneously, shredding of these clouds increases the density of the hot phase of the outflow, leading to large-scale cooling flows that produce high velocity cool gas. These multiphase winds could potentially be the source of cool gas that is found at large distances in galaxy outflows and inner halos.