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## Energy-dependent 3-body loss in 1D Bose gases

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We study 3-body loss in bundles of quasi-1D gases using ultracold Cs atoms in 2D optical lattices. We take the atoms out of equilibrium using the quantum Newton's cradle method, varying the average energy deposited and the strength of confinement in the tubes. Taking advantage of the system's near integrability, we can infer the center of mass energy of all 3-body inelastic collisions that occur. In contrast to such collisions in 3D, and in accord with strictly 1D theory adapted to quasi-1D, we experimentally find that the 3-body inelastic collision rate strongly depends on the collision energy.

**Author:** Prof. WEISS, David (Penn State)

**Co-authors:** Dr ZUNDEL, Laura (Penn State); Mr WILSON, Josh (Penn State); Mr MALVANIA, Neel (Penn State); Dr XIA, Lin (Penn State); Dr RIOU, Jean-Felix (Penn State)

**Presenter:** Prof. WEISS, David (Penn State)

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