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A New Cascade Mechanism in Compressible Turbulence AARNE LEES, HUSSEIN ALUIE, Univ of Rochester — Baropycnal work has been recently identified as a new cascade process that can participate in the transfer of energy across scales in compressible turbulence. We will explain the physical mechanism behind this cascade process. We will use a series of high resolution direct numerical simulations (DNS) of isotropic turbulence at varying degrees of compressibility to analyze baropycnal work and its relative significance.

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