Rate of Entropy Extraction in Compressible Turbulence[1] MA-
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— The rate of change of entropy is measured for a system of particles floating on
the surface of a fluid maintained in a turbulent steady state. This rate of entropy
$\dot{S}$ equals the time integral of the two point temporal velocity divergence correla-
tion function with a negative prefactor. The measurements satisfactorily agree with
the sum of Lyapunov exponents (Kolmogorov-Sinai entropy rate) measured from
previous simulations, as expected of dynamical systems that are very chaotic (Sinai-
Ruelle-Bowen statistics).

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