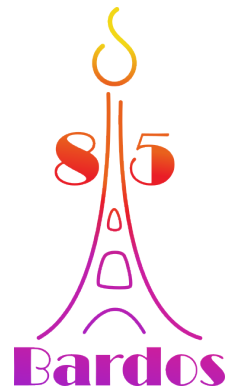


Kinetic equations and turbulence

Fluid Dynamics Beyond Navier-Stokes

David C. Levermore

Fluid dynamic equations that include corrections to the Navier-Stokes approximation are formally derived from a general kinetic equation. The resulting systems respect a local version of the second law of thermodynamics. For some cases local well-posedness can be established.



In honor of Claude Bardos's 85th birthday