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Nota di contenuto	The Boltzmann equation and its formal hydrodynamic limits -- Mathematical tools for the derivation of hydrodynamic limits -- The incompressible Navier-Stokes limit -- The incompressible Euler limit -- The compressible Euler limit.
Sommario/riassunto	The aim of this book is to present some mathematical results describing the transition from kinetic theory, and, more precisely, from the Boltzmann equation for perfect gases to hydrodynamics. Different fluid asymptotics will be investigated, starting always from solutions of the Boltzmann equation which are only assumed to satisfy the estimates coming from physics, namely some bounds on mass, energy and entropy.