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Sommario/riassunto

Wave or weak turbulence is a branch of science concerned with the evolution of random wave fields of all kinds and on all scales, from waves in galaxies to capillary waves on water surface, from waves in nonlinear optics to quantum fluids. In spite of the enormous diversity of wave fields in nature, there is a common conceptual and mathematical core which allows us to describe the processes of random wave interactions within the same conceptual paradigm, and in the same language. The development of this core and its links with the applications is the essence of wave turbulence science (WT) whi