# Wave Mechanics or Wave Statistical Mechanics

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Abstract: By comparison between equations of motion of geometrical optics and that of classical statistical mechanics, this paper finds that there should be an analogy between geometrical optics and classical statistical mechanics instead of geometrical mechanics and classical mechanics. Furthermore, by comparison between the classical limit of quantum mechanics and classical statistical mechanics, it finds that classical limit of quantum mechanics is classical statistical mechanics not classical mechanics, hence it demonstrates that quantum mechanics is a natural generalization of classical statistical mechanics instead of classical mechanics. Thence quantum mechanics in its true appearance is a wave statistical mechanics instead of a wave mechanics.

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