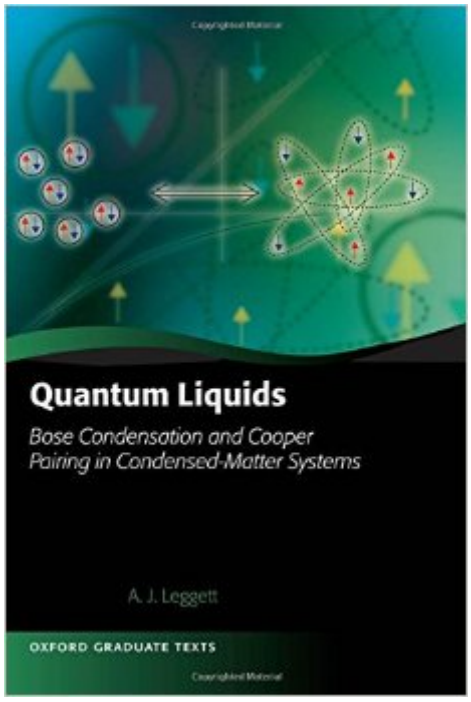
Quantum Liquids: Bose Condensation And Cooper Pairing In Condensed-Matter Systems (Oxford Graduate Texts)



Synopsis

Starting from first principles, this book introduces the closely related phenomena of Bose condensation and Cooper pairing, in which a very large number of single particles or pairs of particles are forced to behave in exactly the same way, and explores their consequences in condensed matter systems. Eschewing advanced formal methods, the author uses simple concepts and arguments to account for the various qualitatively new phenomena which occur in Bose-condensed and Cooper-paired systems, including but not limited to the spectacular macroscopic phenomena of superconductivity and superfluidity; the physical systems discussed include liquid 4-He, the BEC alkali gases, "classical" superconductors, superfluid 3-He, "exotic" superconductors and the recently stabilized Fermi alkali gases.The book should be accessible to beginning graduate students in physics or advanced undergraduates.

Book Information

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Great book! I use it on daily bases.

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