Topic: Bose Einstein Condensation of Atomic Gases
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Abstract:

The topic of our presentation is Bose-Einstein condensation of atomic gases. In class, we were introduced to the concept of the Bose-Einstein Condensation temperature. Building off of this, the first part of our presentation focuses on the development of the theory behind the Bose-Einstein Condensate, starting with its conception with Bose to its development with Tisza. In the second part of our presentation, we explore how a successful Bose-Einstein Condensate is made including what type of bosons are selected to be used, key developments in equipment, and how the Bose-Einstein Condensate is detected. Last, but certainly not the least, we mention the implications the Bose-Einstein Condensate has for the future of science, including its uses in studying quantum behavior, current research involving Bose-Einstein Condensates, as well as, its other possible applications.

List of References:

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