

Low **Temperature T:** De Broglie wavelength λ_{dB} =h/mv $\propto T^{-1/2}$

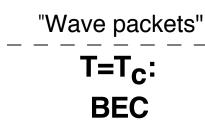
High

Temperature T:

thermal velocity v

density d⁻³

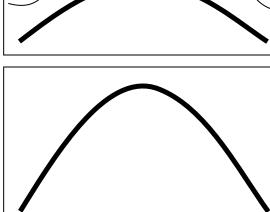
"Billiard balls"





 $\lambda_{dB} \approx d$ "Matter wave overlap"

T=0:



Pure Bose condensate "Giant matter wave"