

LECTURE 13
KINETIC THEORY – BEHAVIOR OF GASES

I. Kinetic Theory - Molecular-level understanding of temperature

II. Experimental Verification of Molecular Speeds

- A. Time-of-flight technique
- B. Maxwell-Boltzmann distribution
 - 1. Most probable speed v_{mp}
 - 2. Average speed \bar{v}
 - 3. Root mean square speed v_{rms}

III. Parameters in a Maxwell-Boltzmann distribution

- A. Mass
- B. Temperature