

Modern Gas Dynamics

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In this lecture, we discuss the role of kinetic theory in the studies of gas dynamic problems.¹⁻⁵ It consists of the following four parts:

- Review of the basic equations of the traditional fluid dynamics.
- Outline of kinetic theory and its role in the studies of gas dynamic problems.
- The position and incompleteness of the traditional fluid dynamics in the light of kinetic theory.
- Examples of typical phenomena due to kinetic effect (Video presentation^{6,7}) and their application to a vacuum pump without a moving part.

References

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