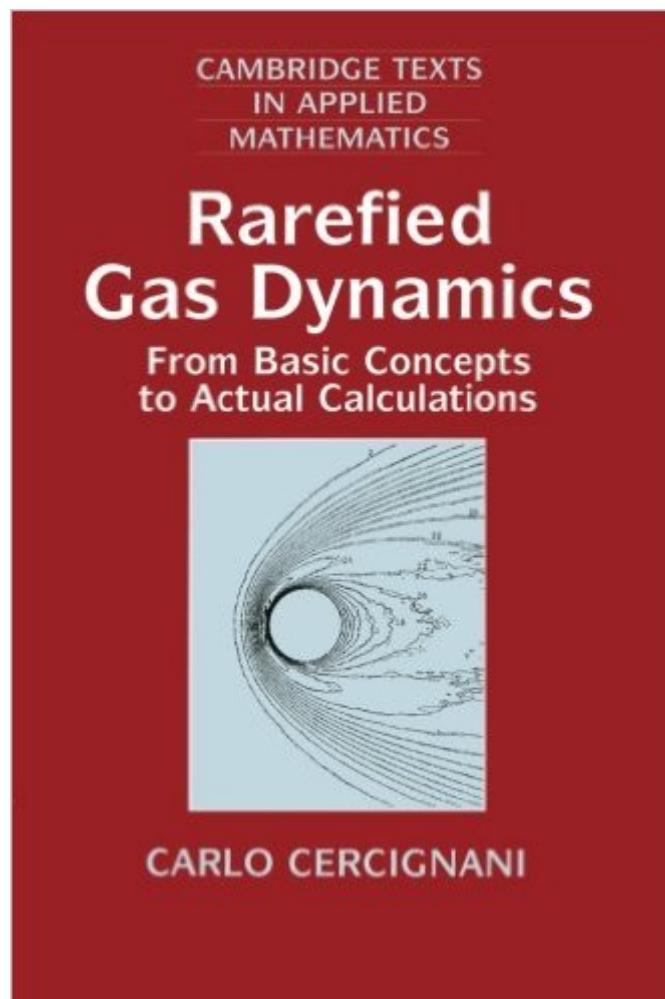# Rarefied Gas Dynamics: From Basic Concepts To Actual Calculations (Cambridge Texts In Applied Mathematics)

Synopsis

This work presents the concepts, methods and applications of kinetic theory to rarefied gas dynamics. After introducing the basic tools, Carlo Cercignani treats problems in plane geometry using all the approximation techniques. He later uses these same techniques to deal with two- and three-dimensional problems. The models include not only monatomic but also polyatomic gases, mixtures, chemical reactions. A special chapter is devoted to evaporation and condensation phenomena. Each section is accompanied by helpful problems. The book can be used in a range of graduate courses in aerospace engineering or applied mathematics.

Book Information

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Good book. I'm mostly interested in evaporation/condensation phenomena in a gas, the book provides review of history of development of the field (with references), and also provides comprehensive analysis with derivations.

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