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A method to determine the virial coefficients from the height dependence of the pressure of gas in the gravitational field

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Abstract

A method for determining the virial coefficients from the data on the height dependence of the pressure of gas in the gravitational field at the constant temperature is suggested. The method allows to determine the virial coefficients from the experimental data for a single density value for a given temperature, unlike conventional methods requiring the experiment for each value of pressure or density for a given temperature.