



PHY1351 Statistical and thermodynamic physics 2

[30h+22.5h exercises] 4 credits

This course is not taught in 2005-2006

This course is taught in the 2nd semester

Language: French

Level: First cycle

Aims

General principles of thermodynamics and of equilibrium statistical mechanics.
Applications to various examples.

Main themes

1. General principals of classical thermodynamics
2. Statistical mechanics in equilibrium
3. Kinetic theory

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Prerequisites: General physics II, 3d statistical part

Support: reference books:

H.B. Callen, Thermodynamics and an introduction to thermostatistics, 2d edition, Wiley, N.Y. 1987. Chap. 1-8, 12, 15-18;

Colin J. Thomson, Mathematical Statistical Mechanics, Princeton University Press, 1979, Chap. 1;

Kerson Huang, Statistical Mechanics, 2d edition, Wiley, N.Y. 1987.