

熱統計物理(一) – 11010PHYS325000

Thermal and Statistical Physics (I)

授課老師：吳國安教授 Email: kuoan.wu@gmail.com

課程大綱：

This course covers two historically different aspects to approach systems with a large number of degrees of freedom, namely thermodynamics and statistical mechanics. We will bridge the microscopic (statistical mechanics) and macroscopic (thermodynamics) descriptions of thermal systems at equilibrium, so that the laws of thermodynamics along with their physical interpretations will be clearer.

上課時間：M3M4W2、教室：Online (<https://meet.google.com/ron-szjs-wzq>)

課程用書：“Concepts in Thermal Physics” by Blundell and Blundell (a free electronic version is available online at NTHU library)、上課筆記

參考書目：

1. “An Introduction to Thermal Physics” by *D. V. Schroeder*
2. “Thermodynamics and an Introduction to Thermostatistics” by *H. B. Callen*
3. “Thermal Physics” by *H. Kroemer and C. Kittel*
4. “Statistical Mechanics of Particles” by *M. Kardar*

Office Hour: 11:00AM – noon every Wednesday [online](#).

演習課: TBD

評分方式：

The course grade will be composed of

- Homework Sets (30%). Collaboration on homework set is encouraged, however you must write up your own reasoning independently.
- Exams: A midterm (35%) and a final (35%).

助教：王培儒(louiscamry@gmail.com)、王治鈞(mike.wang96029@gapp.nthu.edu.tw)、呂學昊(luhsueh hao@gmail.com)