



PHYS2400 Space and high atmosphere physics

[22.5h] 4 credits

This course is taught in the 2nd semester

Teacher(s): Viviane Pierrard, René Warnant
Language: French
Level: Second cycle

Aims

Introduction to electrodynamics of ionised fields and to plasma physics with applications to geophysics and astrophysics.

Main themes

The course is an introduction to Plasma physics. Fundamental notions of completely ionised gas physics are given in this course. Geophysical and spatial physics applications illustrate each of the basic notions. These applications are chosen to give to students a global view of the main phenomena that govern the Sun-Earth relation. The solar and terrestrial notions are placed in historical context. Mathematical and numerical formulations are exposed.

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

Prerequisites: MATH 1140, MATH 1175, MATH 1161, MATH 1180, PHYS 1110, PHYS 1120, PHYS 1130, PHYS 1140.
 Support: written support and reference books.

Other credits in programs

GC23	Troisième année du programme conduisant au grade d'ingénieur civil des constructions	(4 credits)
PHYS21/T	Première licence en sciences physiques (Physique de la terre, de l'espace et du climat)	(4 credits)
PHYS22/G	Deuxième licence en sciences physiques	(4 credits)