



SC

**PHYS2131 Astronomie sphérique et astronomie mathématique**

[22.5h+15h exercices] 3 credits

This course is taught in the 1st semester

**Teacher(s):** Pascale Defraigne, Jean-Pascal van Ypersele de Strihou  
**Language:** french  
**Level:** 2nd cycle course

**Aims**

This course aims to deepen certain chapters of PHYS 1120 and to give the necessary bases to pick up the more specialized courses or personal research in the fields of geodesy, geodynamics, the study of artificial satellite movement, astrophysics (star mass, light and rays).

**Main themes**

The course covers the main domains of astrometry, notably:

- reference signs, movement proper to stars
- atmospheric refraction, parallaxe, aberration
- solar system movement in the Galaxy
- orbital movements in double stars, stellar evolution
- N body problems and movements of planets in the solar system

**Other credits in programs**

<b>MATH21/G</b>	Première licence en sciences mathématiques (Général)	(3.5 credits)
<b>PHYS21/G</b>	Première licence en sciences physiques	(3 credits)
<b>PHYS21/T</b>	Première licence en sciences physiques (Physique de la terre, de l'espace et du climat)	(3 credits)