

University of Pretoria Yearbook 2022

Astronomy for physicists 210 (PHY 210)

Qualification Undergraduate **Faculty** Faculty of Natural and Agricultural Sciences Module credits 24.00 **NOF Level** 06 **Programmes** BSc (Physics) **Prerequisites** PHY 114, PHY 124 **Contact time** 1 discussion class per week, 1 practical per week, 4 lectures per week Language of tuition Module is presented in English

Department Physics

Period of presentation Semester 2

Module content

Introduction to the universe: distance and time scales. Solar System overview. Techniques of astronomy: telescopes and optics, basic radio receiver. Solar system: gas giants, terrestrial planets, small bodies. Stellar evolution and death. Interstellar medium: gas, dust, molecules and masers. Supernova and Pulsars: galaxies and the Milky Way, galactic evolution and classification. Quasars, apparent superluminal motion, black holes. Big Bang, and the age of the universe. Expansion of the universe. SKA, MeerKAT, SALT, HESS and history of astronomy in SA. Other current topics in astronomy.

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