

Tuesday, August 28, 2018

September Classes.

Back to school. Object: Arts and Sciences classes.

September 17, 20, 21:

Private classes Photography in Paris 18 , With Flore.

Dates to comes of DU: Explore and Understand the Universe. (ECU)

Entitled University Diploma Lights on the Universe.

Details:

The path of the DU I am going to start P2 is a journey in several stages:

- **P1: From stars to planets:**
- **Level: L2 | Volume: 40 h.**

Introductory course outlining the basics of modern astronomy focusing on the notions of time, space and distance, but also describing the processes of evolution of stars and formation of planets.

- **P2: Cosmology and Extragalactic Astrophysics:**
- **Level: L2 | Volume: 60 h.**

A very complete course focusing on the major structures of the Universe (galaxies, clusters), cosmology, the structure and evolution of galaxies.

An important part is made to the notions of geometrical optics, of instrumentation, but also to the description of the 4 fundamental forces which govern the evolution of the Universe.

- **P3: Celestial Mechanics, Sun-Earth-Moon:**
- **Level: L3 | Volume: 70 h.**

This course focuses on the celestial mechanics that is the foundation of astronomy.

The notions of landmarks, celestial coordinates are thus approached. The second part of the tour describes solar and lunar eclipses.

- **P4: Fundamentals for Astronomy and Astrophysics:**
- **Level: L3 | Volume: 40 h.**

This course covers different tools for finding one's bearings in space and measuring distances; he revisits Kepler's and Newton's laws in the context of the problem of mass estimation.

Finally, it introduces the basic tools needed to understand the internal structure.

- **P5: Windows on the Universe:**
- **Level: M1 | Volume: 80 h.**

This course develops the problem of locating objects in space and time and different distance measurement methods in the Universe.

It deals with the estimation of masses in the case of multiple systems. Finally, he develops the concepts necessary to understand how stars function, from birth to death.

- **P6: Instrumentation, measurement chain and projects:**
- **Level: M1 | Volume: 60 h.**

This course deals with instrumentation in astrophysics.

It begins with a few main lines of geometrical optics and physical optics, necessary for the understanding of the formation of images in astrophysics.

Then it presents the different steps of a measurement chain: from the collection of the signal to its analysis.

Finally, he develops various instrumental principles.

(adaptive optics, Fourier transform spectrometry, ...)

- **P7: Planetary Sciences:**

- **Level: L3 | Volume: 50 h.**

This course offers a panorama of planetology, from the solar system to exoplanets.

It deals with the formation of planets, surfaces, the thermal and dynamic structure of atmospheres, the small bodies of the solar system and the concept of habitability of planets.

This course is based on a selection of chapters of the digital book [SESP](#)

Update August 29:

Start in October until June:

**Diploma awarded by a University or EPSCP
(Public institution of a scientific, cultural and professional nature)**

At the Paris Observatory, classes giving access to a DU are organized by annual session (October to June) in the classroom (Campus of Paris or Meudon) or via the Internet.

They give rise to an examination which, except in special cases, takes place in person.

The contents:

- **P1: From stars to planets (L2 - 40h)**
Distances and time in the Universe
stars
Planetology

- **P2: Cosmology and Extragalactic Astrophysics (L2 - 60h)**
Distances and time in the Universe
Cosmology

Extragalactic Astrophysics Complements of Physics

- **P3: Celestial Mechanics, Sun-Earth-Moon (L3 - 70h)**

Distances and time in the Universe

Celestial Mechanics, Time, Calendar

Sun, Earth, Moon, Phenomena

- **P4: Fundamentals for astronomy and astrophysics (L3 - 60h)**

Distance and time: tools

Masses: tools

Temperature: tools

- **P5: Windows On the Universe (M1 - 60h)**

Distance and time: Spot and observe

Distance and time: Distance scales

Masses: binary and multiple systems

Masses: Tides and N-body problems

Temperature: HR chart

temperature: Stellar evolution

- **P6: Instrumentation, measurement chain and projects (M1-60h)**

Instrumentation: tools

Instrumentation: measurement chains

Instrumentation: techniques and instruments

- **P7: Planetary sciences L3- 50h**

Formation of planets

Small bodies of the solar system

Planetary surfaces

Thermal structure of atmospheres

Dynamics of atmospheres

Habitability of planets

The contents of the course P7 Planetary Sciences, under construction, essentially correspond to the following pages:

Formation of the solar system, Surface of the planets, Thermal structure of the planets, Atmospheric dynamics, Small bodies of the solar system and Habitability of the planets.

Teacher training:

free course in the following chapters:

- **Celestial Mechanics, Time and Calendars**
- **Sun Earth Moon Phenomena**
- **Distances and time in the Universe**
- **Cosmology**
- **Extragalactic Astrophysics**
- **Complements of Physics**
- **The sun**
- **From the big bang to the appearance of life**
- **History of astronomy**

Practical work for the return to class:

List of activities proposed for fifteen years as part of the trainings for teachers of the Observatoire de Paris and we have acces to do.

It is mainly directed work classified by theme and level.

ACTIVITIES AND EXPERIMENTAL WORK OF ASTRONOMY UNTIL SCIENTIFIC CLASSES.

- **Time and celestial mechanics**
- **Sun-Earth-Moon System**
- **Planets and solar system**
- **Sun**
- **Stars, distant sky, spectroscopy**

I have just received a letter from the director of the National Library who has registered my contents officially, and the BNF is waiting for my Magazine.

Update September 13:

Astro mag 1-2 has arrived at the library in the legal repository of periodicals and is being registered.

Classes update:

Free Resources: Lights on the Universe.

Classes training (Starting October 2018)

Details:

- **Distances and Time in the Universe**
- **Cosmology**
- **From Stars to Planets**
- **Celestial Mechanics, Time and Calendars**
- **Sun Earth Moon Phenomena**
- **Extragalactic Astrophysics**
- **Complements of Physics**
- **Sun and Heliosphere**
- **History of Astronomy**
- **Practical work**
- **Distance and time**
- **Mass**
- **Temperature**
- **Instrumentation**
- **Planetary Sciences: History and Definitions**
- **Planetary Sciences: Formation of Planets**
- **Planetary sciences: Small bodies**
- **Planetary Sciences: Planetary Surfaces**
- **Planetary Sciences: Thermal Structure**
- **Planetary Sciences: Atmospheric Dynamics**

- **Planetary sciences: Habitability**

Due to a change in my planing due to temporary health-complications, were canceled the courses of 21-22-23 and 24 September.

(The private photography course is maintained)

The solfege classes have been replaced by a longer open distant training

of **Myriam Birger**

A musical project.

A musical-composition project related to videography is being developed and Kodak Atworks are under development.

Posted by **Veronica IN DREAM** at **1:19 PM**