STAR FINDERS

Val d'Anniviers (Swiss Alps)

Science summer camp: To go across the cosmos.







Introduction

Come to discover the cosmos and the exotic objects that we can see with a telescope. And more challenging, come to improve the knowledge about exoplanets. There are planets beyond our solar system.





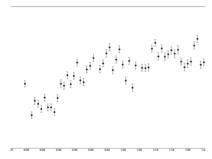


The camp

The main aim of this camp is to get into astronomy. The study of exoplanets is the central theme, and induce a better understanding of our solar system, other star system and the planet formation in the different systems. We lead this project with our set up (telescope and camera) and we participate to real participatory research projects.

According to the age, the experience, and the wishes of the participants, two approaches are possible. Firstly, we get into the basic telescope manipulation and sky observation. Secondly, we learn why getting involved in a participatory research program in astronomy is an amazing experience and how we can realize this by collecting our own data.

Of course, evolving from one "level" to another is possible during the camp between. One of the highlights of each camp is the visit of to the Saint Luc astronomical observatory.







Step one (or for the first week)



You learn to recognize the constellations in the sky and to find the polar star. About the optical instrument, you assemble it, you adjust it, you move it toward something like a far-off galaxy, and you observe your celestial target across it. You understand the objects observed trough the telescope, their formation and composition, and the amazing distance between them and Earth.

You learn what is an exoplanet and how we can detect it. According to your wishes and those of the other participants, we could explore the solar system, the stories of constellations, etc.

Step two (or for the second week)

The scientific project is to verify some exoplanet transits using the photometry. In

other words, you explore the method of photometry, which means the measure of light. Hence, you use a camera on the telescope to study the light of a star through the time. To lead this protocol, you learn the different steps of the method, you choose an adapted target exoplanet, and you adjust more precisely the telescope. Finally, you learn how use the data for a scientific use or just for "esthetical" astrophotography.



Everyday life

Astronomical activities will be carried out during the nights. So, you could sleep in the morning. A lot of activities are possible during the day, specially to prepare the nightly observations. We also spend time around games and meals with the other groups from the biodiversity or geology thematic.

We walk in the mountain to do a bivouac one time a week, if the weather allows it. The walk is adapted to the participants, and the night sky, as well as the landscape, are incredibly beautiful!







See you soon in the field!



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https://www.science-camps.com/Star-Finders-Val-d-Anniviers.html https://www.osi-univers.org/