

# SOLAR ENERGY and ASTRONOMY IN CHILE

OBSERVE AND LEARN ABOUT THE SKY BY DAY AND NIGHT  
THREE WEEK IMMERSION PROGRAM – JULY 17TH TO AUGUST 5TH 2023

## PACKAGE INCLUDES

- Three-week program with academic content
- Housing (family or residence/hotel)
- Airport Transfer on arrival
- Local transport to/from university and to company/institutional visits
- Cultural activities and support from local Chilean students
- Food and drinks (Coffee breaks and lunch covered, dinner excluded)
- Access to all UDP facilities (Library, gym etc.)
- Academic course content



## WHY CHILE?

- Chile is positioned as one of the best locations for observing the sky and the universe due to its particularly clear skies, dry climate and lack of wind.
- Almost 70% of the capacity for observing the universe is located in Chile.
- Chile has the highest level of solar incidence and is the sight of Latin America's first solar thermal plant.
- Chile has made one of the fastest green transitions on the world.
- Chile is leading country in the Americas for investing in renewable energy, surpassing Brazil, Canada and the United States.
- The skies over Chile's Atacama Desert are blessed with over 300 clear nights per year and therefore part of the country has become one of the world's principal sites for astronomical observatories.
- Today Chile is a major astro-tourism destination with many facilities to get an on-sight experience of the sky and the universe.

## WHY UDP?

- Modern high-quality research and teaching university.
- Amongst the top universities with a public and social commitment.
- Leading faculty with up-to-date local and international knowledge in their field.
- Recognized as top 3 in Latin America in the Times higher Education Young Universities Ranking.
- The Faculty of Engineering and Sciences UDP is one of the most research productive Schools at UDP when it comes to astrophysics and energy.



## COSTS

**Total program package costs to be requested at our email address.**

Special discount for students from universities with active agreement with UDP.

Write us at [summerschool@mail.udp.cl](mailto:summerschool@mail.udp.cl) for more information and pricing details.



# SOLAR ENERGY and ASTRONOMY IN CHILE

Check our latest program and come to Chile to learn about astronomy, astrophysics, solar energy among other topics together with the best skies in the world.

THREE WEEK IMMERSION PROGRAM  
JULY 17TH TO AUGUST 5TH 2023

## THE PROGRAM

During this international English taught program in the dynamic city of Santiago, and in the northern City of Antofagasta, **you will experience a set of seminars and lectures, including visits to local institutions and experimental activities.** Several planned social activities will allow you to get a real local immersive experience on these two important topics that relate directly to the unique location, climate and geography of Chile.



## TOPICS

- Astronomy and astrophysics
- Solar Energy and its influence on renewable energies
- Global warming and the greenhouse effect
- Measurements of solar resources on earth
- Conversion of solar energy into a useful energy mechanism (heat and electricity)
- Applications of solar energy in astronomy

## SPEAKER PROFILES

The teachers and speakers of the program are high profile representatives of UDP academic community and local and international organizations, research centers and relevant partners in the field of Solar Energy and Astronomy in Chile.



## LOCAL VISITS

The program includes a field trip Antofagasta. The Antofagasta region is probably one of the best in the world for solar applications, thanks to his clear sky and high Global Horizontal Radiation ranging from 5.9 kWh/m<sup>2</sup>/day in the coast to 7.3 kWh/m<sup>2</sup>/day in the mountains. Secondly, the “Cerro Dominador” is the first and largest concentrated solar power (CSP) plant in South America with a nominal capacity of 210 MW. This plant provides energy 24/7 thanks to the combination of a 110 MW CSP plant and an auxiliary 100 MW photovoltaic (PV) plant. Both locations are unique in its kind compared to other places and will allow you to apply knowledge from the course directly into real life situations.