

International Summer School  
of the **Faculty of Physics**



**Photovoltaics**

## Photovoltaics

The International Photovoltaic Summer School aims to give hands-on experience on different fundamental and technical aspects of photovoltaic systems. During the Photovoltaic summer school, the participants will learn how solar cells work: we will travel from the energetical structure of materials through junction formation to specific carrier transport mechanisms. The goal of the first part of the school is to help understand which materials properties and external factors, like temperature or illumination conditions, influence the photovoltaic conversion efficiency (PCE) of a solar cell. From this

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perspective, we will finally make an overview of different PV technologies.

During the laboratory part, the participants will measure optoelectronic characteristics of solar cells and experimentally verify how PCE depends on temperature and irradiance. They will also learn how to fit current-voltage characteristics to extract relevant transport parameters, and simulate the operation of a solar cell in dedicated computer software.

### Format:

5-day course of online lectures, 5-day practical training in our laboratory

### Duration:

**26<sup>th</sup> June – 07<sup>th</sup> July 2023**

2 weeks (60h: 30h online lectures and 30h laboratories onsite – Faculty of Physics)

**Credits:** 5 ECTS

### More about

## International summer schools of WUT

### The target group:

**foreign students/ PhD students** from the European Universities of the ENHANCE Alliance and other universities all over the world

### Scholarships:

only for participants who will take part in a blended-learning summer school to reimburse travel, accommodation and food costs

### Who can apply:

foreign students enrolled for the first-cycle degree studies (undergraduate studies) or a long-cycle Master's programme, who have completed at least 4 semesters of studies or enrolled for second-cycle studies (postgraduate studies) and PhD students

**English level:** at least B2

<https://summerschools.spinaker.pw.edu.pl/>



### Contact:

**International Summer School of the Faculty of Physics**

### Photovoltaics:

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