

# PLANCKS 2021 Rules

## 1. Definitions

- 1.1. **PLANCKS:** The **P**hysics **L**eague **A**cross **N**umerous **C**ountries for **K**ick-ass **S**tudents is a competition event organised by a member committee of the International Association of Physics Students (IAPS).
- 1.2. **OC:** The organising committee of PLANCKS.
- 1.3. **Website:** [2021.plancks.org](https://2021.plancks.org)
- 1.4. **Participant:** Member of a participating team that competes in PLANCKS.
- 1.5. **Jury:** The group of people who oversee the problems administered during the competition and the grading of the problems.
- 1.6. **Preliminary:** A competition held to choose the team representing a certain country in PLANCKS.

## 2. Participation

### 2.1. Introduction

- 2.1.1. Participation is only possible in teams consisting of 3 or 4 students.
- 2.1.2. Any violations of the General PLANCKS rules, of the PLANCKS 2021 rules, IAPS Code of Conduct, IAPS Terms and conditions or the IAPS regulations may result in disqualification or expulsion from the competition or event, at the discretion of the organisation.
- 2.1.3. If a member of a team is disqualified due to any violation mentioned in the previous point, the whole team will not be able to participate in PLANCKS 2021 Online.

### 2.2. Selection of teams

- 2.2.1. Each country can send one team.
- 2.2.2. If too many teams register, a selection will be made by the OC. This selection will be country-dependent, to ensure that PLANCKS 2021 Online truly is a world-wide competition. In most cases, when too many teams from one country register, the organisation encourages them to first organise a Preliminary (Point 2.3). In cases where

this is not done, the teams that will compete are selected using a random generator, with teams registered during the first round of registration being considered first.

2.2.3. The organisation has the right to deny the participation of teams before the start of the competition if they have reasonable arguments to do so.

## **2.3. Preliminaries**

2.3.1. Preliminaries are organised by members of IAPS. The number of preliminaries is limited to one preliminary per country.

2.3.2. Preliminaries are organised in the spirit of PLANCKS, wherein problems are solved in a team-based format.

2.3.3. The organisers of preliminaries for a country must register their preliminary with the OC via the registration form that can be found on the website. Via the form, they must inform the OC of their plans (date of the event, registration dates, website and social media if any). If there are any changes after the form submission, they must email the OC of such changes.

2.3.4. The organiser of preliminaries must notify the OC when the event concludes, with information about the winning team.

2.3.5. The preliminaries must be approved by the organising committee to ensure that there is only one preliminary happening per country.

2.3.6. The preliminaries may be advertised on the website, on the IAPS website and on the social media platforms of PLANCKS 2021.

2.3.7. The use of preliminaries to select which teams will register for PLANCKS is encouraged, but not required.

2.3.8. Participants of a preliminary must adhere to the IAPS code of conduct.

## **2.4. Registration**

2.4.1. There will be two types of Registration, depending on a Preliminary taking place or not.

2.4.2. The first type of registration is Individual Team Registration.

2.4.3. Individual Team Registration will occur in two rounds:

- 1<sup>st</sup> round: 1 December 2020 until 17 January 2021.
- 2<sup>nd</sup> round: 1 February 2021 until 14 March 2021 (Pi day).

2.4.4. The Individual Team Registration will occur through the [events.iaps.info](https://events.iaps.info) website. Information regarding details of the registration, such as entry fees and these rules, will be posted on the PLANCKS website.

2.4.5. The second type of registration is through a Preliminary (Point 2.3).

2.4.6. If a team from a country organising a Preliminary is interested in participating in PLANCKS 2021, they must register with the Preliminary organisers and compete in this Preliminary competition.

2.4.7. After participating in a Preliminary competition, only the winning teams of such a Preliminary may register for and participate in PLANCKS 2021.

## 2.5. Teams

2.5.1. A participant may compete in a team for an entry fee of 5€. This is excluding transaction fees.

2.5.2. Participants can only be part of one team.

2.5.3. Teams will compete for the country where at least 50% of the team is enrolled at a university.

2.5.4. Changing the composition of a team is only possible with the permission and acknowledgement of the OC.

2.5.5. The team must define a team captain. If the captain of a team is no longer able to participate in the competition, a new team captain must be chosen by the team.

2.5.6. A team participates for the title "Winner of the 8th edition of PLANCKS", and for the silver and bronze titles with the following respective prizes:

- 1<sup>st</sup>:  $(\hbar/2) \times 10^{37}$  € (527.29€)
- 2<sup>nd</sup>:  $(\hbar/3) \times 10^{37}$  € (351.52€)
- 3<sup>rd</sup>:  $(\hbar/4) \times 10^{37}$  € (263.64€)

## 2.6. Eligibility

2.6.1. Only students enrolled at bachelor or master studies can participate in the competition.

2.6.2. Only members of IAPS can participate in the competition.

## 3. The competition

### 3.1. Introduction

- 3.1.1. The language used in the competition is English.
- 3.1.2. The competition will last for 36 hours.
- 3.1.3. Cheating will result in immediate disqualification of the entire team.
- 3.1.4. Official complaints about the competition will be accepted via email to the OC ([oc2021@plancks.org](mailto:oc2021@plancks.org)) until the end of the competition. Complaints submitted later might not be accepted.
- 3.1.5. Any attempt to influence the jury, authors of the problems, or the problem markers can result in disqualification.
- 3.1.6. Any attempt to gain information about the problems before the competition can result in disqualification.

### 3.2. Problems

- 3.2.1. The OC will provide 12 problems regarding different subjects within the field of physics.
- 3.2.2. Problems will be written by a professor or a lecturer.
- 3.2.3. The problems will be shared with the teams via the Moodle platform associated with the website.
- 3.2.4. Only one solution per problem can be submitted.
- 3.2.5. The teams will submit the solutions to each problem via the Moodle platform.
- 3.2.6. When a problem is unclear, a participant can ask for a clarification. The OC will respond to this request. If this response is relevant to all teams, the OC will provide the other teams with this information.
- 3.2.7. The OC has the right to change or withdraw problems during the competition. When this happens, the OC will inform all teams.

### 3.3. Resources

The teams can have access and can consult any physical or online resource during the competition.

### **3.4. Communication**

3.4.1. Participants will be able to reach the OC at any time during the event and, specifically, during the competition.

3.4.2. Participants can communicate with each other throughout the competition, and this communication is encouraged to occur via the platforms that will be available (Zoom and Discord).

3.4.3. Participants will follow any decision carried out and communicated by the OC during the competition.

### **3.5. Grading**

3.5.1. The members of the Jury will be announced on the website prior to the event.

3.5.2. At least PhD level markers, overseen by the Jury, will be used for the grading process.

3.5.3. Each submitted solution is acknowledged.

3.5.4. For each problem, the OC has a correct solution.

3.5.5. The team with the most acknowledged points is the winner. In case of a tie, the jury has the right to appoint a winner based on the creativity of the solutions.

### **3.6. Special rules**

3.6.1. The OC has the right to disqualify teams for misbehaviour or breaking the rules.

3.6.2. The OC has the right to stop the competition, extend the competition time or change the scores in exceptional conditions.

3.6.3. In situations to which no rule applies, the OC decides.