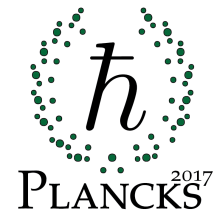


Guidelines for Creating problems

PLANCKS 2017 – International Physics Competition



Introduction

In the PLANCKS-contest, teams of 4 physics students (undergraduate or Master level) are given the task of solving 10 problems in 4 hours. Every team has its own room and a blackboard. As a team, they are supposed to solve as many problems as possible.

Rules

The competition has the following rules:

- Working language is English
- Simple calculators (not programmable)
- No experiments
- No formularies and books except for a dictionary

Problems

Usually the problems consist of a short introduction to the topic and some figures or uncommon formulas.

In contrast to an exam it is not desired to let the students recite learned knowledge. Rather the students should be encouraged to find a new approach to an unfamiliar topic. They are NOT required to solve ALL 10 problems in 4 hours. If one team manages to get all points the competition was too easy. A good problem gets harder stepwise, in order to having every team stop at a certain point.

The problems should cover most of modern physics disciplines, which is why a consultation with the relative organizing committee is recommended. Examples from the last years can be found <http://plancks.info/contest/sample-exercises>.

Grading

The problems are corrected and graded directly after the competition with the aid of sample solutions. In case of lack of clarity, the grading committee (consisting of three persons) decide with a simple majority. This committee consists of mostly Ph.D-students or very advanced physics students. You are however most welcome to grade your examples as well or to give the task to one of your assistants.

Questions

Name and E-mail address of relative organizing committee

International responsible and coordination: Matthias Werl, problems@plancks2017.at