

OPhO Problem Writer Application



1 Logistics

This is the application to become a problem writer for the Online Physics Olympiad. We are looking for people that enjoy physics and work well with our team. The application is really short and simple: a couple of short answer questions, two original problems, and an improvement to a past problem. Submit your problems and short answers at this link:

<https://airtable.com/appGDttjLvdZ79TdW/shrEGVK1HgT6pbujB>

(the short answers are on the form itself). The deadline is **February 14, 2024 at 11:59 GMT**. Good luck!

2 Original Problem Submission

We are looking for **two** original problems that you have written by yourself, with accompanying solutions. Your submissions can either be typed (e.g. using \LaTeX) or handwritten. Please upload both of your original problems in the same file. We do not particularly care about how *difficult* the problems are. The format and style (whether short response or multi-part) is up to you! The problems do not need to be perfect (minor details like computational errors are OK). We care more about your ability to generate ideas. You may also include the process behind your writing of the problems (there is a spot in the form).

2.1 Objectives

The overarching objectives for each problem are:

- to be enjoyable for contestants to solve.
- to encourage creativity and critical thinking.

2.2 Criteria

Your submission:

1. **may** be either approachable by most contestants or more advanced. Take a look at [past invitational and open problems](#) for reference).
2. **should** focus on physical ideas, rather than “bashing” equations.
3. **must not** be copied or largely copied from a preexisting source. If you draw light inspirations from a source, you **must** include where the idea came from in your submission.

3 Problem Improvement Submission

A large part of working in a team environment is to give feedback and improve each other's problems. For this submission, you will pick a preexisting problem (e.g. a past OPhO problem, or a problem from your country's Olympiad) and modify/add **one or more** part(s) to make the problem better.¹

3.1 Constraints

Your submission, **must** clearly state where the original source is **and** add a nontrivial change. Examples of the latter may include:

- Finding a major point of confusion (or even perhaps an error!) and improving the problem. Something like editing the grammar or how the question is phrased, however, is not sufficient.
- Adding additional parts that relate to the original problem is acceptable.
- Changing the context, e.g. turning a circuits problem into a thermodynamics problem.

¹“Better” is a vague term, so you have the freedom to interpret this however you like. If you think the problem would benefit from being easier, harder, or introduce a similar idea, go for it!