



[2013](#) [2014](#) [2015](#) [2016](#) [2017](#)

Rethinking Foundations of Physics 2017

Saturday March 11 - Saturday March 18 2017

Traditional conferences and subject-specific workshops offer little room for having in-depth discussions about the foundations of physics in an open, creative and speculative way. Since the first meeting in 2013, this workshop has offered a platform for engaging in such discussions.

The workshop centers on discussions in small groups. The aim of these is to reveal implicit assumptions in physics, to clarify the conceptual core of its guiding ideas and to explore new ways of thinking about problems in basic research. Ideally, the workshop thus bridges the gap between deep critical thinking and creative brainstorming. To lay the ground for these sessions, there will be talks given by the participants.

The following general questions convey the spirit of the workshop and may serve as guidelines for more specific subjects of the discussion sessions:

- **Which mathematical, conceptual, and experimental paradigms underlie modern formulations of QM, GR, and QFT?**
- **Can they be relaxed or changed? If so, how?**
- **Which new mathematical developments could be relevant for future foundations?**
- **Are there promising new or non-standard experimental possibilities?**

The workshop is aimed at PhD students and Postdocs in physics, mathematics and philosophy. Participants are not required to have substantial knowledge in all modern physical theories, nor do they have to be currently working on basic research questions. We look forward to applications from people who are passionate about conceptual questions, open to other fields and, most importantly, eager to engage in deep discussions.

The deadline for applications is January 15, 2017. Further examples of the type of topics to be expected can be found on the websites of the previous workshops ([2014](#), [2015](#), [2016](#)).

Date: Saturday, March 11 - Saturday, March 18, 2017

Place: Mountain Cabin, Dorfgastein, Austria

Participants: 18

Workshop fee: 350 Euros (includes accommodation, shuttle to the cabin, all meals, and nonalcoholic beverages, financial support for both workshop fee and travel expenses is available*)

Location:

The workshop will take place in a beautiful, cosy mountain cabin which offers all necessary luxuries (a bath, showers, a sauna - and even a toilet). However, we want to point out that a mountain cabin is not a hotel: Accommodation will be in dorms with bunk beds, there are no single rooms and bathrooms have to be shared. Also, internet is not available.

There is no catering provided - we will do the cooking ourselves. To this end, we form cooking teams of two or three to prepare breakfast, lunch and dinner.

Application:

Please apply via email to application@rethinking-workshop.org (deadline is January 15, 2017). Your application should contain the following:

1. A brief statement of motivation for attending the workshop (a few paragraphs).
2. A proposal of at least one, maximum two questions for discussion sessions. Please explain:
 - Why you consider these worth discussing.
 - How they fit the idea of the workshop as explained above.

A selection of topics will be made according to the interest and expertise of the participants.

Note that the questions need not originate from your own work.

3. For most discussion sessions, we will have kick-off talks given by the participants. Their goal should be twofold: first, they should serve as introductions, drawing out the questions and clarifying any necessary background knowledge; second, they should present one existing approach, as well as the speaker's own Denkansatz (thoughts). Please specify:
 - For which of your discussion proposals you would be willing to give a talk.

- One specific work whose main idea you find particularly relevant/enlightening for addressing the question and upon which you would base your talk.
4. Furthermore, please include the following information about yourself:
- Your current occupation and institution.
 - Your main area of work and further areas of interest.
 - Information about dietary requirements, allergies, etc.
 - Whether you would like to apply for funding (please roughly specify the required amount for traveling).*

* Funding is available provided that your institution or any other third party cannot reimburse you for the workshop fee and/or travelling expenses. Since we need to plan how we can distribute our available, but limited, funding, it can only be provided if you apply for it at the time of your application.

In case of any questions, do not hesitate to contact us at application@rethinking-workshop.org.

Poster download:

[JPG](#) or [PDF](#)



Supported by:



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