

## CALL FOR CONTRIBUTIONS

GIREP Webinar 2020

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### **Call for contributions - oral presentations**

Dear colleagues,

You are invited to participate in the GIREP Webinar 2020 on Physics Education being hosted by the University of Malta. Due to the COVID-19 pandemic, it has been decided that GIREP will hold this first International Webinar which will focus on Teacher education and discuss the theme:

#### **‘PHYSICS TEACHER EDUCATION – WHAT MATTERS?’**

The Malta Webinar 2020 is being organized by the International Research Group on Physics Teaching – GIREP [Groupe International de Recherche sur l’Enseignement de la Physique] and the University of Malta, Faculty of Education, Department of Mathematics and Science Education and Faculty of Science, Department of Physics, with the cooperation of the European Physics Society – Physics Education Division [EPS-PED] and Multimedia in Physics Teaching and Learning [MPTL].

The main foci of this Webinar will be Initial Teacher Education [ITE] and Teachers’ Continuous Professional Development [CPD]. The suggested topics for Webinar contributions are the following:

1. Strategies for physics teacher pre-service education at all levels
2. Inquiry Based Learning and Teacher Education
3. Professional learning and practitioner inquiry
4. University school cooperation
5. Multimedia in Teacher Education
6. Physics Education research in Teacher Education
7. Exercises and problem solving in Teacher Education
8. Experiments and laboratory work in Teacher Education
9. Contemporary topics in physics
10. Physics in Primary Education

The format of the webinar will be the following: only a keynote speech in plenary and short oral presentations by participants. Contributions presented will focus on the Webinar topics and will contribute to the discussions held in the Work group Discussion (WD). The latter will consist of in-depth discussions in small groups of researchers and practitioners, led by WD leaders. Each WD will consist of discussions which will be developed in two sessions and five steps:

1. general overview of the topic
2. preliminary discussion of the most important problems
3. more thorough discussion into specific aspects and possible solutions of the problem
4. general summary
5. discussion on the contribution of the workshop to the outcomes of the webinar

The topics of the Working group Discussion (WD) are

**[i] ICT and Multimedia in Teacher Education (Initial and Further PD).**

Responsibles: *Peter Demkanin, Ton Ellermeijer, Lars-Jochen Thoms*

**[ii] Experiments and lab work in teacher education.**

Responsibles: *Ian Bearden, Leoš Dvorák, Gorazd Planinšič*

**[iii] Quantum Mechanics in Teaching and learning physics.**

Responsibles: *Sergej Faletic, Marisa Michelini, Gesche Pospiech*

**[iv] Formal, non-formal and informal aspects physics education at primary level.**

Responsibles: *Mojca Cepic, Marco Gilberti, Dagmara Sokolowska*

**[v] Strategies for pre-service physics teacher education at all levels.**

Responsibles: *Dina Curso, Claudio Fazio, Zuzana Jeskovsa*

**[vi] In-service teacher professional learning strategies.**

Responsibles: *Eilish McLoughlin, Wim Peeters, David Sands*

Submission of your contribution proceeds in two steps:

1. The first step is to submit extended abstract ranging from 400 to 600 words before the webinar.
2. The second step is to submit a full paper for IOP proceedings or Springer book of selected papers after the webinar, according with the result of the peer-review double blind process.

Deadline for submission of the abstract of your proposal is 15<sup>th</sup> September 2020, according with the template available on the website.

Every submitted abstract will be reviewed before 15<sup>th</sup> October 2020 and the abstract book will be published in the GIREP and webinar website.

All full-text papers, which would have been presented at GIREP Webinar 2020, will be double reviewed after the webinar and published as follows.

- The qualified papers will be published in the IOP Journal of Physics Conference Series (JPCS). JPCS occurs electronically on the Internet and is indexed in Scopus.

- A number of contributions will be selected as the best for publication in the GIREP book (Selected Papers) published by Springer (<https://www.springer.com/gp>).

In this way, the published webinar 2020 papers will uphold the standards of publication ethics as well as easily available to the scientific and teacher communities.

**International Advisory Committee and Scientific Programme Committee**