



# GIREP Newsletter

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## EDITOR'S SECTION

Dear Colleagues,

We are approaching the end of 2018. December is just the right moment to briefly summarize work done under GIREP vzw in the past year and to outline the plans for the nearest future.

The electronic GIREP newsletter is issued to inform GIREP active members as well as everybody interested in GIREP activities about ongoing work continued between GIREP seminars and meetings.

On behalf of the GIREP Committee I would like to invite you to contribute to the GIREP Newsletter. There is so much going on in your institutions and your countries concerning physics education and physics education research. Please, inform us about upcoming events (also at national level), new initiatives and all other announcements that are relevant to GIREP's topics of interest, spirit and mission, and which you would like to share with the GIREP community.

The deadline for sending information to be included in the next issue is April, 30th, 2019.

We are looking forward to a fruitful cooperation on the development of the newsletter with GIREP representatives, GIREP members and GIREP friends.

**The GIREP Committee wishes you Merry Christmas  
and a Happy New Year!**

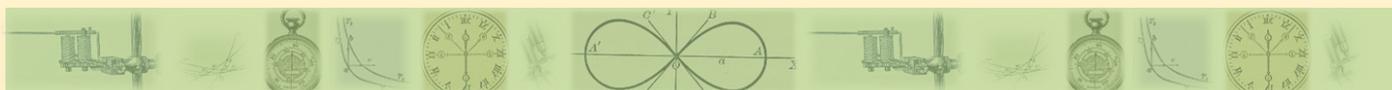
Dagmara Sokołowska

Starting from February 2013 the GIREP newsletter has been recorded permanently as online publication in the ISSN register as follows:

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## GIREP COMMITTEE ACTIVITIES

Since the last newsletter in December 2017 the GIREP Committee (GC) took part in five Skype meetings and additionally two in-person meetings - one in Belgium and another one organized during the GIREP-MPTL Conference 2018 in San Sebastian, Spain.

GIREP Committee members, elected in 2016, are:

- **President of GIREP, Marisa Michelini**, University of Udine, Italy
- **Vice-President of GIREP in charge of activities aimed at universities and research, Claudia Haagen-Schützenhöfer**, University of Graz, Austria
- **Vice\_president of GIREP in charge of activities aimed at teachers, Wim Peeters**, PONTOn vzw, Flanders, Belgium
- **GIREP Secretary, Dagmara Sokołowska**, Jagiellonian University, Krakow, Poland
- **GIREP Treasurer, Leoš Dvořák**, Charles University in Prague, Czech republic

A **GIREP Auditor** is **Ton Ellermeijer** from Foundation CMA, Amsterdam, Netherlands

During the last year the work of the GC has focused on:

- Practicalities in relation to legal status of GIREP vzw (e.g. the Annual Report for 2017, including financial report and its approval by the auditor)
- Development of GIREP Thematic Groups
- Organization of the GIREP General Assembly during the GIREP Conference 2018 in San Sebastian
- Proposals for organization of the future GIREP seminars and conferences (Budapest 2019, Malta 2020)
- Proposal for organization of 3<sup>rd</sup> WCPE in Vietnam
- GIREP cooperation with eleven partner organizations on the basis of signed agreements and with two other organizations without a signed agreement
- GIREP representation at Physics and Science Education conferences and seminars: MPTL 2018, ESERA 2019
- Involvement of GIREP national representatives
- GIREP Seminar 2016 Conference Proceedings published by IOP
- GIREP books
- GIREP web site and newsletter

## ANNUAL GIREP GENERAL ASSEMBLY 2018

### Minutes

The GIREP GENERAL ASSEMBLY 2018 took place on the 12th of July, from 5:00 pm till 6:30 pm during the GIREP-MPTL Conference 2018 in San Sebastian. The first call was made at 4:45 p.m. by the President, Marisa Michelini and the second call was made at 5 p.m. and altogether 57 participants arrived. Altogether 52 GIREP members were present, including five members of the GIREP Committee (GC).

The meeting started with voting on approval of the minutes of the GIREP vzw General Assembly 2017 (51 votes pro, 0 counter voices, 1 abstention) sent to GIREP vzw members in the GIREP Newsletter No. 59 in December 2017. The GIREP President, **Marisa Michelini** welcomed the general Assembly and presented her short report on GIREP Committee meetings since the last GIREP GA in July 2017, informing about the main discussed issues.

Afterwards, **Dagmara Sokołowska**, the GIREP Secretary, presented the GIREP vzw Annual Report for year 2017.

Main issues reported:

In period 1<sup>st</sup> January – 31<sup>st</sup> December 2017 the GIREP Committee was convened six times for on-line meetings via Skype and twice for meetings in person. Main issues discussed during the meetings:

- GIREP-MPTL Conference 2018 in San Sebastian, Spain
- GIREP-ICPE-EPEC-MPTL Conference 2019 in Budapest, Hungary
- 3rd WCPE and GIREP Seminar 2020
- GIREP cooperation with other partner organizations
- Development of GIREP Thematic Groups; two new GTGs: Innovative Pedagogical Methods for University Physics and Strategies for Active Learning (SAL)
- Involvement of GIREP national representatives
- Agreement with Springer on publishing GIREP Books
- The first GIREP Book – Gesche Pospiech (Editorial); GIREP book on papers selected from GIREP Seminar 2016 (Springer); Proceedings of GIREP Seminar 2016; GIREP-ICPE-EPEC 2017 Proceedings and a book of selected papers
- GIREP financial issues, including bank account and PayPal account
- GIREP web site and Newsletter No. 59 (December 2017)
- GIREP medals
- Organization of the future GIREP conferences

The report had been made available to all GIREP members before the GA 2017 via link: [http://www.girep2016.confer.uj.edu.pl/docs/GIREP\\_vzw\\_Annual\\_Report\\_2017.pdf](http://www.girep2016.confer.uj.edu.pl/docs/GIREP_vzw_Annual_Report_2017.pdf) and was sent as a link to all GIREP members on the 6th of July 2018. No comments has been made by the audience.

Subsequently, the GIREP Treasurer, **Leoš Dvořák** presented an overview of the GIREP vzw Financial Report 2017, available at that time at: [http://www.girep2016.confer.uj.edu.pl/docs/2017\\_Jaarrekening\\_report.pdf](http://www.girep2016.confer.uj.edu.pl/docs/2017_Jaarrekening_report.pdf), and accompanied by the Audit Report of the GIREP vzw Financial Report in year 2017, put at GIREP members' disposal at: [http://www.girep2016.confer.uj.edu.pl/docs/Report\\_Auditor\\_2017.pdf](http://www.girep2016.confer.uj.edu.pl/docs/Report_Auditor_2017.pdf)

After this part of presentation unanimous voting on approval of the Annual Report 2017 took place (52 votes pro, 0 counter voices, 0 abstentions) and the board was discharged in an unanimous vote (52 votes pro, 0 counter voices, 0 abstentions).

Subsequently GIREP vzw activities in line with GIREP policy in year 2017 were presented by GIREP Committee members. The President, **Marisa Michelini**, informed about the GIREP publications in production: the book *The Role of Laboratory Work in Improving Physics Teaching and Learning* (Eds. D. Sokolowska, M. Michelini; Springer) and GIREP 2016 Proceedings : *Research-based proposals for improving teaching and learning – focus on laboratory work* (Ed. D. Sokolowska; IOP). Two more publications based on articles submitted after the GIREP-ICPE-EPEC 2017 Conference in Dublin have been announced. Marisa Michelini mentioned that on the basis of written agreement between GIREP and Springer Publisher for publishing Selected Paper Books and Books on Specific Content Topics, the series of GIREP books will be continued. A similar written agreement was being prepared between GIREP and IOP for publication of GIREP Conference Proceedings. The latter will be available in open access. The books published by Springer will be accessible for each GIREP member and conference participant via the password sent by e-mail.

**Marisa Michelini** recalled agreements with eleven international bodies: AAPT, APS, CIAEF, EPS-PED, IACPE, iSER, IAPS, LAPEN, MPTL, PESJ (on the basis of a signed agreement) and ESERA and ICPE (without a signed agreement) with focus on Science and Physics Education and Research. She appreciated high quality and autonomous work of GIREP Thematic Groups and plans for establishment of two new GTGs in the nearest future.

Following her presentation **Claudia Haagen-Schützenhöfer**, the Vice-president of GIREP responsible for activities aimed at universities and research, reported in short activities done by GTGs in the last year and during the GIREP-MPTL Conference in San Sebastian. She also invited person interested in active cooperation with GIREP to send their proposal for a new GTG to the GIREP Committee.

Subsequently two nearest GIREP conferences were announced by their organizers, namely GIREP – ICPE – EPEC - MPTL Conference 2019 in Budapest, organized by Budapest University of Technology and Economics, represented by Beata Jarosievitz and Csaba Sukosd, as well as the 3<sup>rd</sup> World Conference in Physics Education on *Innovating physics education: from teacher education to school practices*. The organizers of both events invited the audience to participate in the conferences and distributed the flyers. The first announcement of GIREP Seminar 2020 in Malta has been issued.

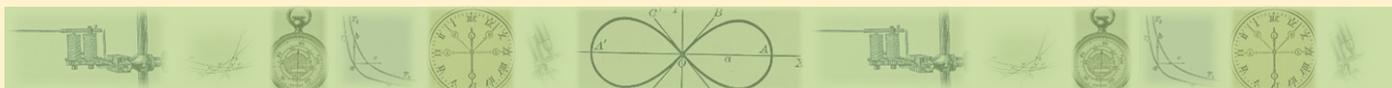
The GIREP Vice president, **Wim Peeters**, gave a few words about the GIREP vzw policies in relation to GDPR.

Claudia Fracchiolla informed the GA about the session “Early Career Discussion” organized for the first time under GIREP during the conference in San Sebastian and the main suggestions coming from it:

- An early career session should occur every year
- Include early career members of the community into more organizational tasks, such as conference organization, newsletter preparation and editing.
- Create a professional development session for graduate students (not about reporting results but to help students develop skills, learn about methodologies, etc.)
- Having a “how to” session in the newsletter that discuss things about organizing sessions, travel grant applications
- More advertisement for the session to have bigger participation
- Have an online presence or some other form to help build community
- Mentorship program

At the last point of agenda, a few questions and initiatives arose from the audience.

- Proceedings of the current GIREP conference should be published the same year
- Knut Neumann suggested that GTGs should reach somehow people from outside GIREP interested in the same topics.
- Gerry Feldman envisioned that GTG leaders should go beyond invited GIREP symposia and the GIREP newsletter and do something more (maybe a group of interest meetings).



- David Sands suggested possibility of the financial support from EPS for organizing additional events/actions by GTGs (e-mail should be sent to D. Sands). K. Neumann mentioned possibility of receiving similar funds for whole housing from the Institute in Leiden.
- PhDs offered to write articles for the GIREP newsletter. They also suggested preparation of a kind of “manual” for new persons getting involved in GIREP Conferences and activities.
- Cesar Mora express his appreciation for growing internationalization of GIREP. He informed about record-breaking 30 participants attending GIREP-MPTL Conference in San Sebastian. At the same time he suggested the need of more visibility of bodies cooperating with GIREP in GIREP conferences and actions undertaken by GIREP.
- Wim Peeters encouraged GIREP members to share information about national conferences in the GIREP newsletter.
- A question was asked by a participant from Australia about potential cooperation with relevant bodies in Australia and the GIREP Committee expressed their interest.
- A new initiative of organization of the Project Corner in each subsequent GIREP Conference, similar to the event organized in San Sebastian was appreciated.

**Marisa Michelini** thanked the organizers of the GIREP-MPTL Conference in San Sebastian for their great organization of the event and the GIREP Committee members for their voluntary work during the past year.

The next GIREP General Assembly is planned on the 4<sup>th</sup> of July 2019 during the GIREP – ICPE – EPEC - MPTL Conference 2019 in Budapest.

## GIREP Conference Proceedings and GIREP books

Published:

- Selected papers from 2<sup>nd</sup> WCPE in Sao Paolo, *Upgrading Physics Education to Meet the Needs of Society* (ed. M. Pietrocola Pinto de Oliveira) is available at: <https://www.springer.com/gp/book/9783319961620>
- On-line Proceedings of the GIREP 2016 Seminar in Krakow, *Research-based proposals for improving teaching and learning – focus on laboratory work* (ed. D. Sokolowska) were published by IOP and are available by open access at: <http://iopscience.iop.org/issue/1742-6596/1076/1>
- Selected papers presented in GIREP Seminar 2016, *The Role of Laboratory Work in Improving Physics Teaching and Learning* (eds. D. Sokołowska, M. Michelini) have been published by Springer: <https://www.springer.com/gp/book/9783319961835>. According to the Springer Bookmetrix during one month since publishing the book has got already more than 1400 downloads.

On the basis of the written agreement between GIREP and Springer Publisher for publishing Selected Paper Books and Books on Specific Content Topics, the series of GIREP books will be continued. The books published by Springer will be accessible for each GIREP member and the participant of the relevant GIREP conference via a password sent by e-mail. Analogous written agreement between GIREP and IOP is under preparation. It will relate to the GIREP Conference proceedings published on-line in open access.

In production:

- The book of selected papers with contributions presented in GIREP-ICPE-EPEC 2017 Conference in Dublin (Springer)
- On-line Proceedings of GIREP-ICPE-EPEC 2017 Conference in Dublin (IOP)
- The book of selected papers (Ed. Gesche Pospiech) on Mathematics in Physics Education (Springer)

## GIREP THEMATIC GROUPS (GTG)

GIREP Thematic Groups (GTG) are focused communities of GIREP members interested in sharing their expertise in particular facets of physics education, from working with children, through undergraduate work, to teacher training. The aim of the GTG is to stay in touch as critical friends, exchanging thoughts, materials and findings from the varied contexts in which we work and contribute to GIREP activities on the topic of GTG. The leader of a GTG takes responsibility for involving and organising the participation of active colleagues in the GTG in the conferences: offering an activity (workshop or poster-symposium, symposium) in each Conference or Seminar of GIREP. GTGs come into existence when someone offers to run one, and applies to the GIREP Committee. If the negotiations go well the GTG is announced in the newsletter.

### GTG on Energy

- Group Leader: Paula Heron (University of Washington, USA)
- Contact: [pheron@phys.washington.edu](mailto:pheron@phys.washington.edu)

### GTG Mathematics in Physics Education

- Group Leader: Gesche Pospiech (Technical University of Dresden, Germany)
- Contact: [gesche.pospiech@tu-dresden.de](mailto:gesche.pospiech@tu-dresden.de)

### GTG Physics Education Research at University (PERU)

- Group Leader: Jenaro Guisasola (University of the Basque Country, Spain)
- Contact: [jenaro.guisasola@ehu.es](mailto:jenaro.guisasola@ehu.es)

### GTG Evaluation of Learning and Instruction (ELI)

- Group Leader: Genaro Zavala, Tecnológico de Monterrey, Mexico
- Contact: [genaro.zavala@itesm.mx](mailto:genaro.zavala@itesm.mx)

### GTG Physics Preparation of Teachers in Grades K-6

- Group Leaders: Stamatis Vokos, Seattle Pacific University, USA & Federico Corni, Università degli Studi di Modena e Reggio Emilia, Italy
- Contacts: [vokos@spu.edu](mailto:vokos@spu.edu), [federico.corni@unimore.it](mailto:federico.corni@unimore.it)

### GTG Problem Solving in Physics Textbooks

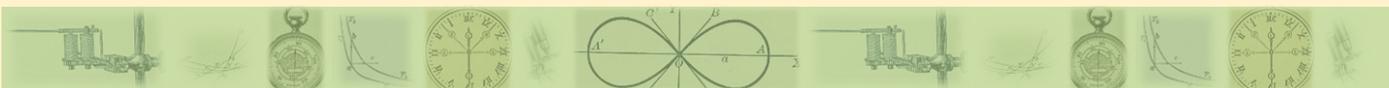
- Group Leader: Josip Slisko, Benemérita Universidad Autónoma de Puebla, Puebla, México
- Contact: [jslisko@fcfm.buap.mx](mailto:jslisko@fcfm.buap.mx)

### GTG Innovative Pedagogical Methods for University Physics

- Group Leaders: Gerald Feldman, George Washington University, USA & Guillaume Schiltz, ETH Zürich, Switzerland
- Contacts: [feldman@gwu.edu](mailto:feldman@gwu.edu), [schiltz@phys.ethz.ch](mailto:schiltz@phys.ethz.ch)

### GTG Strategies for Active Learning (SAL)

- Group Leader: Claudio Fazio, University of Palermo, Italy
- Contact: [claudio.fazio@unipa.it](mailto:claudio.fazio@unipa.it)



## GIREP THEMATIC GROUPS REPORTS ON RECENT ACTIVITIES

During the GIREP-MPTL conference 2018 in San Sebastian, four of the GTGs were represented in symposia and workshops.

### 1. **GTG Physics Education Research at University (PERU)**

SYMPOSIUM ON TEACHING PROPOSALS FOR IMPROVING STUDENTS' UNDERSTANDING USING PHYSICS EDUCATION RESEARCH

We presented research based proposals, which try to overcome the gap between the results of PER and the classroom practice. In this presentation, I discussed several examples of the application of research-based techniques to classroom instruction in upper division and graduate physics courses, how the specifics of the student audience have resulted in modifications of the pedagogical approach, and the student response to these instructional strategies.

*Jenaro Guisasola (University of the Basque Country, Spain)*

### 2. **GTG Mathematics in Physics Education**

SYMPOSIUM ON ROLE OF GRAPHS IN THE MATHEMATIZATION PROCESS IN PHYSICS EDUCATION

In this symposium of the GIREP Thematic Group "Mathematics in Physics Education" we elucidated the role of graphs for mathematization. We focused on the interpretation and construction of graphs in the interplay of mathematics and physics. The contributing research groups employed qualitative research methods as well as a quantitative approach.

*Gesche Pospiech (Technical University of Dresden, Germany)*

### 3. **GTG Innovative Pedagogical Methods for University Physics**

SYMPOSIUM ON INNOVATIVE PEDAGOGY IN UNIVERSITY PHYSICS

We presented a symposium of four invited talks, which addressed various issues related to implementation of innovative pedagogical approaches, classroom spaces for active learning, sustainability of such reforms, and possible barriers, and constraints that may impede such implementations. The speakers covered a wide range, including faculty, staff, and administrators, and they represented these concerns in four different countries.

*Gerald Feldman, George Washington University, USA & Guillaume Schiltz, ETH Zürich, Switzerland*

### 4. **GTG Evaluation of Learning and Instruction (ELI)**

WORKSHOP ON ASSESSING STUDENTS' UNDERSTANDING OF PHYSICS CONCEPTS

A great deal of research in physics education research is devoted to assessing students' understanding. Therefore, it is essential to have good instruments to determine what they think. There are many tools available that are adequate: 1) a series of carefully designed open-ended questions in which students must write their reasoning, 2) an interview in which, following a protocol, the interviewer can fully understand each student's reasoning, or 3) a carefully designed multiple-choice question test. Each type of instrument are used for different purposes, and they are implemented for a different number of students.

*Genaro Zavala, Tecnológico de Monterrey, Mexico*

## GIREP-MPTL 2018 CONFERENCE REPORT

*Research and Innovation in Physics Education: two sides of the same coin.*

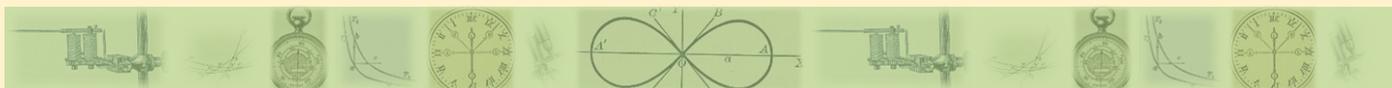
The GIREP-MPTL 2018 international conference offered the opportunity for 280 delegates from 49 countries to come to San Sebastian, from 9<sup>th</sup>-13<sup>th</sup> July, to share their knowledge and experiences under the theme of “Research and Innovation in Physics Education: two sides of the same coin”. The conference was organized by the Donostia Physics Education Research Group (DPER) at University of the Basque Country (UPV/EHU) in cooperation with the Conference of International Research Group on Physics Teaching (GIREP), Multimedia Physics Teaching and Learning (MPTL) and Cursos de Verano-Udak Ikastaroak at UPV/EHU.



The Conference was sponsored by Real Sociedad Espanola de Fisica, European Physics Society-Physics Education Division (EPSPED), City Hall of San Sebastian, Provincial Council of Guipuzcoa and International Conference on Physics Education (ICPE) of the Commission C14 of the International Union of Pure and Applied Physics (IUPAP). The Conference organizers gratefully appreciate the patronage received from the Department of Education of the Basque Government for this conference.

Altogether, there were 181 oral presentations, 49 poster presentations, 10 workshops, 6 plenary, 2 plenary dialogues, 5 GIREP Thematic Group contributions- across the **seven conference topics**:

- 1) Physics teaching and learning at Primary and Secondary School
- 2) Physics teaching and learning at University
- 3) Preservice and in service physics teachers education
- 4) Physics education in non-formal setting
- 5) Physics into STEM teaching and learning
- 6) ICT and multimedia in Physics Education
- 7) Nature of Science, gender and socio-cultural issues in physics education

**Participants came from the following countries:**

Argentina: 5	Colombia: 1	Greece: 2	Mexico: 11	Russian Fed.: 1	Thailand: 2
Australia: 4	Czech Republic: 14	Hungary: 6	Netherlands: 12	Slovakia: 2	Turkey: 5
Austria: 5	Denmark: 2	Ireland: 6	New Zealand: 1	Slovenia: 3	UK: 11
Belgium: 4	Ecuador: 2	Israel: 12	Norway: 1	South Africa: 1	U.S.A: 10
Brazil: 14	France : 3	Italy: 24	Poland: 7	Spain: 38	Uruguay: 3
Canada: 2	Finland: 4	Japan: 2	Portugal: 3	Sweden: 2	Venezuela: 1
Chile: 1	Germany: 19	Malta: 3	Romania: 2	Switzerland: 3	Vietnam: 1

The conference provided an opportunity to recognize outstanding individuals in Physics Education. Professor Gorazd Planinšič from the University of Ljubljana (Slovenia) received the GIREP medal for his relevant contributions in Physics Education. 57 PhD, master degree and undergraduate students participated in the conference, presenting posters and oral presentations.

**The six invited speakers were:**

- Dr. Gorazd Planinšič
- Dr. Claudio Fazio
- Dr. Terhi Mantyla
- Dr. Trinh Ba Tran
- Dr. Antxon Santamaria
- Dr. Mila Kryjevskaja

The idea of “Dialogue” was launched for the first time in GIREP conferences. The Dialogue involves two experts and a leader who gives a brief feedback on the subject and proposes to the experts questions for the discussion. The two invited dialogues were:

**Dialogue 1: Primary, Secondary and University Pre-service Physics Teacher Education.**

What science education is relevant to become physics teacher in a technological world?

Leader: Marisa Michelini.

Invited speakers: Knut Neumann and Gabriela Lorenzo.

**Dialogue 2: The actual and potential impact of physics education research in students’ learning.**

The complex relationship between research and practice: what can we do to reduce the gap?

Leader: Mieke De Cock.

Invited speakers: Jaume Ametller and Paula Heron.

The Conference included seven workshops, two invited by GIREP, one invited by EPS and one invited by MPTL. The Conference program also included three Symposiums and one workshop from the GIREP Thematic Group (GTG) organized through international cooperation. The Conference also provides an opportunity for the international exchange focus on two sessions: European Projects Corner and Early Career Topical Discussions. In the “European Projects Corner”, ongoing European projects and ideas to find synergies and possible partners were presented. In the “Early Career Topical Discussion”, Postdocs, new faculty, and other junior Physics Education Research (PER) members were invited to this topical discussion to meet and discuss common issues.

The second and third day of the Conference were dedicated to celebrating the teachers of physics and included two plenary presentations, two dialogues, 61 oral presentations, 6 symposiums and 6 workshops on classroom teaching ideas and practices.

### Best PhD Student Poster Prize was awarded by the European Physical Society

- ❖ Flavia Polati, poster P39: *Debates on gravitation theories in a pre-service physics teaching course: some challenges and possibilities.*

### Best PhD Student Oral Prize was awarded by the Real Sociedad Espanola de Fisica

- ❖ Daniele Buongiorno: *Research-based proposals on Optical Spectroscopy and Secondary students' learning outcomes.*

## Program Outline

Monday, 09 JUL		Tuesday, 10 JUL		Wednesday, 11 JUL		Thursday, 12 JUL		Friday, 13 JUL	
Miramar Palace		Musikene		Musikene		Musikene		Musikene	
09:00-10:15	Registration	09:00-10:00	Lecture <b>Claudio FAZIO</b>	09:00-10:00	Lecture <b>Terhi MÄNTYLÄ</b>	09:00-10:00	Lecture <b>Trinh Bá TRAN</b>	09:00-10:00	Lecture <b>Mila KRYJEVSKAIA</b>
10:15-11:00	Opening ceremony	10:00-10:15	Pause	10:00-10:15	Pause	10:00-10:15	Pause	10:00-10:15	Pause
11:00-11:15	GIREP MEDAL. Relevant contributions in innovation and research in physics education	10:15-11:15	Dialogue 1: <b>Physics Teachers Education</b>	10:15-11:15	Dialogue 2: <b>Physics Education Research</b>	10:15-11:15	Lecture <b>Antxon SANTAMARÍA</b>	Engineering School	
11:15-11:45	Coffee Break	Engineering School		Engineering School		Engineering School		10:15-12:00	Parallel sessions
12:00-13:00	Lecture <b>Gorazd PLANINŠIČ</b>	11:15-11:45	Coffee Break	11:15-11:45	Coffee Break	11:15-11:45	Coffee Break		
13:00-14:30	Lunch	12:00-13:30	Parallel sessions	12:00-13:30	Parallel sessions	12:00-13:30	Parallel sessions	12:30-13:30	Closing Ceremony
Engineering School		13:30-15:00	Lunch	13:30-14:30	Lunch	13:30-15:00	Lunch	13:30-15:00	Farewell cocktail
15:00-16:30	Parallel sessions	15:00-16:30	Parallel sessions	13:45-14:45	Topical Discussion Working lunch	15:00-16:30	Parallel sessions		
16:30-17:00	Coffee Break	16:30-17:00	Coffee Break			16:30-17:00	Coffee Break		
17:00-18:00	Poster sessions	17:00-18:00	Poster sessions			17:00-18:00	GIREP Assembly		
18:00-19:00	GIREP National Representative Meeting and GTG Leaders Meeting	City Hall		14:45	Excursion - The Flysch	Petritegi Cider House			
		19:00-20:00	Welcome reception			Evening	Conference dinner		

## Proceedings

The conference papers will be published in two formats. Keynote papers and some selected conference papers will be published in a printed form, with ISBN code by Springer. Other presentations which pass the reviewing process will be published in an electronic form by Institute of Physics (IOP) under Journal of Physics Conference Series (JPCS). See: <https://www.girep2018.com/en/how-to-prepare-your-proceeding> The deadline for paper submission is 14<sup>th</sup> of January 2019. Notification of acceptance will be sent to the authors in the Spring 2019.

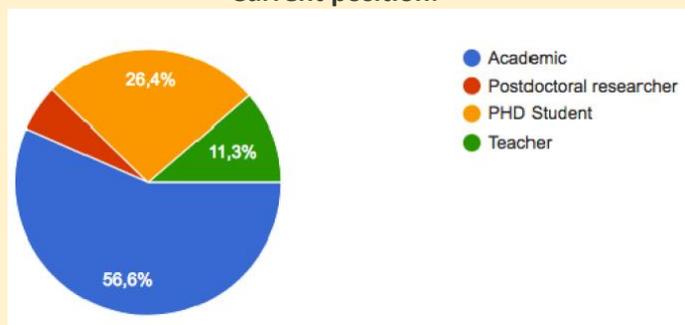
We would like to thank all contributors, especially the Invited Speakers, GIREP Committee, chairs, referees and local committee without whom the organization of the conference would not have been possible.

*Jenaro Guisasola and Kistina Zuzá, on behalf of the local organizing Committee of the GIREP-MPTL 2018 Conference*

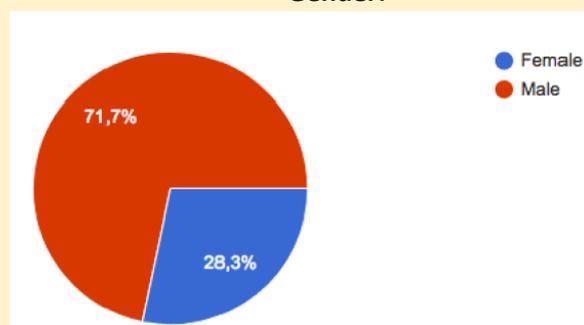
## GIREP-MPTL 2018 CONFERENCE POST SURVEY

Just after the conference GIREP-MPTL 2018 in San Sebastian an on-line survey for evaluation of the meeting was organized. 53 participants took part in it out of 2800 attending the conference. We present below some of the results.

**Current position:**



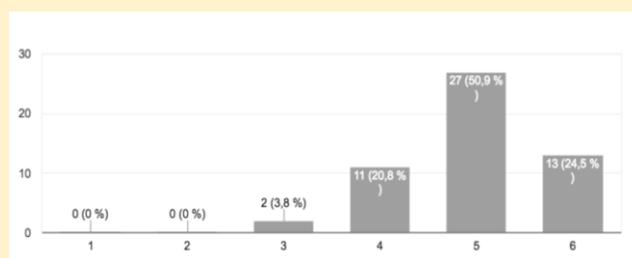
**Gender:**



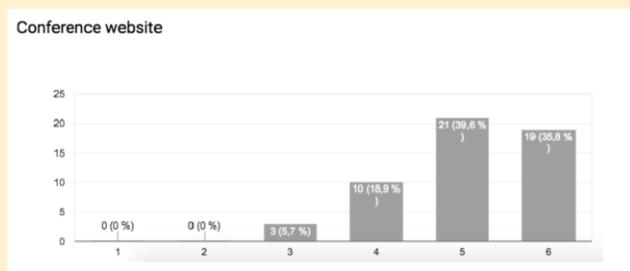
The subsequent part of the survey was taken on the 6-point scale:

1-N/A, 2-totally disagree, 3 – disagree, 4- neutral, 5 – agree, 6 – totally agree

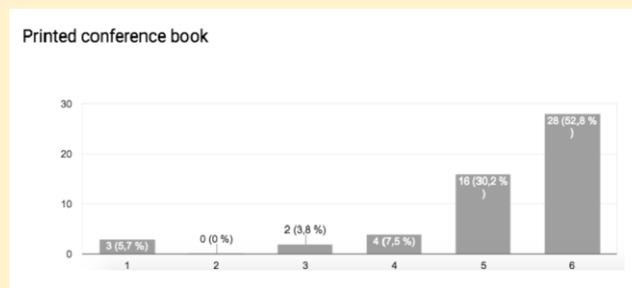
**How would you rate your overall experience of the GIREP-MPTL 2018 conference?**



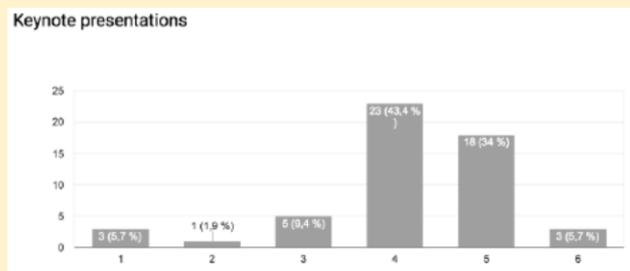
**How would you rate conference website?**



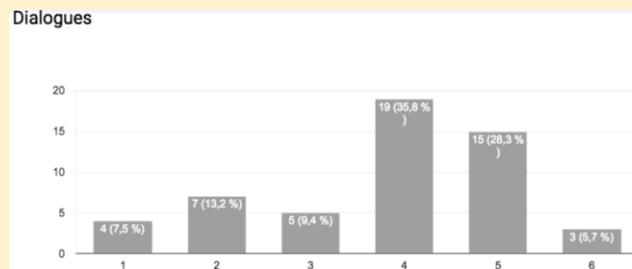
**How would you rate printed conference book?**



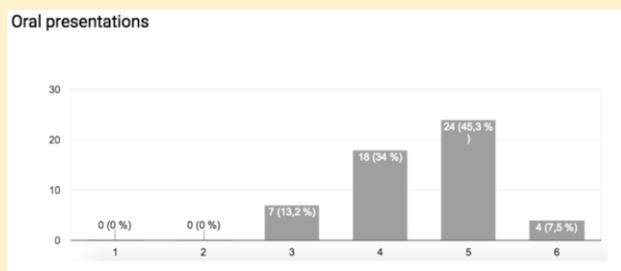
**How would you rate keynote presentations?**



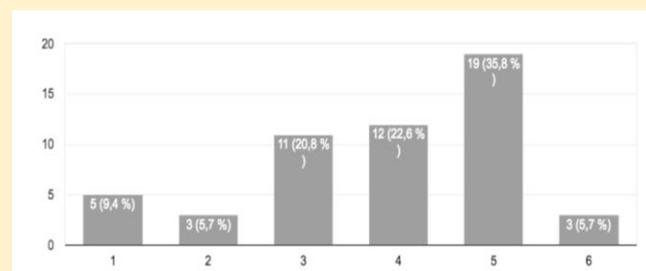
**How would you rate dialogues?**



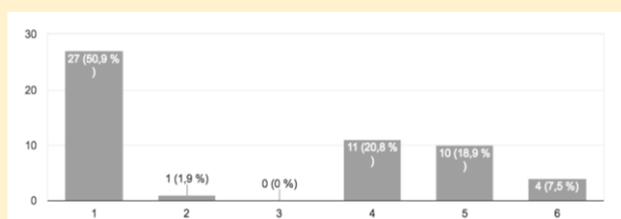
### How would you rate oral presentations?



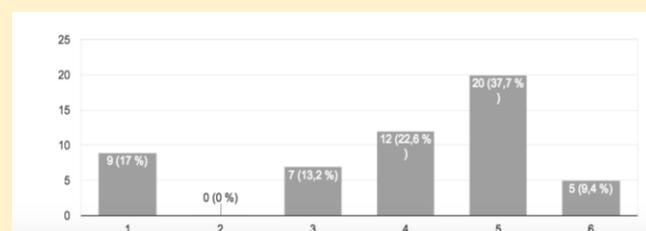
### How would you rate poster presentations?



### How would you rate ICTDemos/Workshops?



### How would you rate symposiums?



The post-surveys issued after GIREP Conferences will be continued. We encourage the participants to take part in them. If answered by a huge number of attendees, the post-surveys may give valuable information about the conferences and guide the future conference organizers.

## WHAT IS GOING ON? NEWS FLASHES FROM GIREP COUNTRIES AND PARTNERS

The 1<sup>st</sup> Physics Teacher Congress was organized in Poland on 14-16 September 2018 in Łódź by the faculty of Physics and applied Computer Science of the University of Łódź.



For the first time teachers active at all levels of physics education, starting from primary school and ending at the university level gathered together in one place and had the opportunity to discuss common issues of physics education. The number of more than 300 participants surprised even the organizers encouraged the leading Polish universities to continue the initiative in the future.

More information about the event available at: <http://knf1.uni.lodz.pl/> (in Polish).

## GIREP-ICPE-EPEC-MPTL Eötvös-Year 2019 Conference - Budapest, Hungary



Dear Colleagues,

We invite you to participate in the GIREP-ICPE-EPEC-MPTL Eötvös-Year 2019 International Conference.

The Roland Eötvös Physical Society together with its partner organisations is proud to organize this conference, and we will do our best to make it both fruitful and enjoyable. The GIREP-ICPE-EPEC-MPTL Eötvös-Year 2019 International Conference will be an opportunity not only to present the results of your work, but also to communicate and discuss common research topics and best practices with colleagues. The main theme of the conference is *“Research and practice in physics education to celebrate Eötvös centenary”*. Roland Eötvös (1848-1919) was a famous Hungarian physicist whose main achievement was to demonstrate the strict proportionality between the inertial and gravitational mass with an unprecedented precision. This result became a strong basis of the general relativity. The UNESCO has declared to be associated to commemorate the centenary of his death in 2019. That is why this conference is also associated to the Eötvös-Year.

The conference is organized by:

- Groupe International de Recherche sur l'Enseignement de la Physique (GIREP)
- International Commission on Physics Education (ICPE)
- European Physical Society - Physics Education Division (EPS PED)
- Multimedia in Physics Teaching and Learning (MPTL)

together with

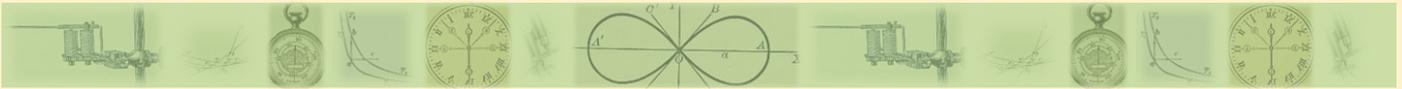
- Roland Eötvös Physical Society (ELFT) Hungary,
- Budapest University of Technology and Economics (BME),
- Institute for Computer Science and Control of the Hungarian Academy of Sciences (SZTAKI)

It will be endorsed by:

- International Commission on Physics Education (ICPE) of the Commission 14 of the International Union for Pure and Applied Physics (IUPAP)

The main topics of the conference will be the following:

- A. Strategies and methods to improve Physics learning and teaching
- B. Multimedia in Physics Teaching and Learning
- C. Contemporary Physics and Modern Physics in School
- D. Physics Curriculum: Development and Implementation
- E. Experiments in Physics Education
- F. Early Science Learning
- G. Environmental Physics
- H. Teacher Education and postgraduate education
- I. Informal learning and science centres
- J. Outreach of Physics



The Scientific Advisory Committee invites proposals for oral presentations, symposia, workshops and posters focused on the different aspects of the essential knowledge, skills and attitudes mainly related to the topics listed above.

**Important dates:**

Registration opens with call for abstracts	5th December 2018
Abstract Submission Deadline	1st February 2019
Notification of Acceptance	20th March 2019
Early-bird Registration Deadline	15th April 2019
Regular registration deadline	22nd May 2019
Late Registration Deadline	1st June 2019
Conference Dates	1st-5th July 2019



The conference **webpage** is: <https://girep2019.hu>

The web address for the registration is: <https://girep2019.hu/manage/register>

A template for the abstracts is available on the conference page in the following link: <https://girep2019.hu/for-attendees/download/>

The conference contact **e-mail** address is: [contact@girep2019.hu](mailto:contact@girep2019.hu)

On behalf of the Organising Committee, we cordially invite you to Budapest to attend GIREP-ICPE-EPEC-MPTL Eötvös-Year 2019 International Conference, actively participate in its sessions, and contribute to the continued success of this conferences series.

Beata JAROSIEVITZ - Chair

Csaba SÜKÖSD - Co-Chair



## FUTURE CONFERENCES



### AAPT Winter Meeting 2019

The AAPT winter Meeting will be organized 12-15 January in Houston, Texas, USA:

<https://www.aapt.org/Conferences/wm2019/>

### ESERA Conference 2019

The Conference will be organized in Bologna, 26-30 August 2019 (call for abstracts until 31<sup>st</sup> of January 2019):

<http://www.esera2019.org/>

## GIREP MEMBERSHIP RENEWAL & FEES

We would like to remind you that you can pay your GIREP membership fee (30 euro per year) either by bank transfer or via PayPal. Both possibilities are described in detail on the GIREP web page

<https://girep.org/information.html> available from the menu item "Info & Contact" on GIREP web pages.

After a login, you can also visit the page

[https://girep.org/member/membership\\_fees.html](https://girep.org/member/membership_fees.html) (available simply from the menu, too). You can see your membership fee payment history there. At that page, there is also a possibility to pay your GIREP membership fee using your credit card via PayPal (though this is slightly more costly than sending the fee to GIREP as "a friend" via PayPal).

Please, be aware that the address of the bank of the GIREP account is: Heuvelstraat 56, 2530 Boecheout. The account number will stay the same. The information on GIREP webpage will be updated in due time.

Last but not least: It should be reminded that according the GIREP Statutes, Art.6, §5: "Members not paying their yearly fee before the 1st of July of the current year are no longer considered as members." So, please, be so kind and pay your membership fee in time.

*Leos Dvorak, GIREP Treasurer*



As a GIREP member you have **exclusive access** to the digital proceedings of the past GIREP conferences. In addition you can get a **reduced registration fee** for GIREP conferences and for conferences of our partner organisations (see GIREP Newsletter 54).

## CALL FOR CONTRIBUTIONS TO THE GIREP NEWSLETTER

We would like to encourage all GIREP newsletter readers to participate in sharing news and ideas about physics teaching and learning and physics education research. Please, send contributions for the next GIREP Newsletter to GIREP Secretary, Dagmara Sokolowska [dagmara.sokolowska@uj.edu.pl](mailto:dagmara.sokolowska@uj.edu.pl) until the end of April 2019.

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