Call for contributions
INTERNATIONAL CONFERENCE GIREP EPEC 2015
July 6-10, Wrocław, Poland

The Conference of International Research Group on Physics Teaching (GIREP)
European Physical Society - Physics Education Division (EPS PED)
University of Wrocław (UWr)

Organizers
University of Wrocław, Institute of Experimental Physics, Division of Physics Teaching
The Foundation for the University of Wrocław

Honorary patronage
Polish Physical Society
Prof. dr. hab. Marek Bojarski, Rector of University of Wrocław
Cezary Przybylski, Marshal of Lower Silesia Voivodeship

Scientific Advisory Committee
Mojca Čepič, EPS-PED Committee, University of Ljubljana, Slovenia
Costas Constantinou, EPS-PED Committee, University of Cyprus, Cyprus
Ewa Dębowska, Chair of the Organizing Committee, University of Wrocław, Poland
Leoš Dvořák, GIREP and ICPE Committee member, Charles University in Prague, Czech Republic
Ton Ellermeijer, MPTL Committee member, CMA, Amsterdam, The Netherlands
Francisco Esquembre, MPTL Committee member, Universidad de Murcia, Spain
Hendrik Ferdinande, EPS-PED Committee member, retired at University of Gent, Belgium
Raimund Girwidz, MPTL President, University of Ludwigsburg, Germany
Zofia Goląb-Mayer, Jagiellonian University, Cracow, Poland
Claudia Haagen-Schuetzenhoefer, GIREP Vicepresident, University of Graz, Austria
Zdeňka Koupilová, EPS-PED Committee member, Charles University in Prague, Czech Republic
Robert Lambourne, ICPE Committee member, The Open University, United Kingdom
Jan Lawrence, GIREP past-Vicepresident, Institute of Physics, United Kingdom
Marisa Michelini, GIREP President, University of Udine, Italy
Cesar Eduardo Mora Ley, LAPEN President, Instituto Politécnico Nacional, Mexico
Andreas Mueller, Universite de Geneve, Switzerland
Hodeo Nitta, ICPE President, Tokyo Gakugei University, Japan
Wim Peeters, GIREP Vice-president, DKO (vzw) and PONTon vzw, Belgium
Gorazd Planinšič, EPS-PED Chair, University of Ljubljana, Slovenia
Julias Salinas, IACPE and CIAREF President, Argentina
David Sands, EPS-PED Committee member, University of Hull, United Kingdom
Dagmara Sokolowska, GIREP General Secretary, Jagiellonian University, Cracow, Poland
M. Fatih Taşar, iSER President, Gazi Universitesi, Turkey
Urbaan Titulaer, EPS-PED Committee member, retired at University of Linz, Austria
Laurence Viennet, EPS-PED Committee member, retired at University Denis Diderot Paris 7, France
Nicola Vittorio, EPS-PED Committee member, University of Rome, Italy
Stamatis Vokos, APS T-TEP Chair, University of Seattle, USA
Els de Wolf, University of Amsterdam, the Netherlands
Dean Zollmann, AAPT representative, Kansas State University, USA
Local Organising Committee
Małgorzata Bacia, Director of Lower Silesian Centre for Teacher Training, Wrocław, Poland
Ewa Dębowska, University of Wrocław, Poland
Tomasz Greczyło, Chair of the Local Organizing Committee, University of Wrocław, Poland
Bernard Jancewicz, Chair of Wrocław Division of Polish Physical Society
Jerzy Jarosz, University of Silesia, Katowice, Poland
Elżbieta Kawecka, Computer Assisted Education and Information Technology Centre, Warsaw, Poland
Piotr Skurski, University of Lodz, Poland
Dagmara Sokołowska, Jagiellonian University, Cracow, Poland
Bartosz Strzelczyk, University of Wrocław, Poland

Invited speakers:
Mojca Čepič, Ljubljana University, Slovenia
Gareth Jones, Imperial College, London, UK
Knut Neumann, Kiel University, Germany
Edward F. Redish, University of Maryland, USA
Roman Rosiek, Pedagogical University, Cracow, Poland

Dear Colleagues,

We invite you to participate in the GIREP EPEC 2015 International Conference.

The University of Wrocław is proud to organize the GIREP EPEC 2015, and we will do our best to make it both fruitful and enjoyable. The GIREP EPEC 2015 will be an opportunity not only to present the results of your work, but also to communicate and discuss common research topics with colleagues. The main theme of the conference is “Key Competences in Physics Teaching and Learning”. There are eight Key Competences defined (EUR-Lex. (2006). Official Journal L 394/10 of 30.12.2006:

- Communication in the mother tongue.
- Communication in foreign languages.
- Mathematical competence and basic competences in science and technology.
- Digital competence.
- Learning to learn.
- Social and civic competences.
- Sense of initiative and entrepreneurship.
- Cultural awareness and expression.

Key Competences (KC) in the shape of knowledge, skills and attitudes appropriate to each context are fundamental for every individual in a society. The Key Competences are all interdependent and intertwine different aspects such as critical thinking, creativity, initiative, problem solving, risk assessment, decision taking and constructive management of feelings. All of them appear crucial in nowadays educational environment.

KC serve as a reference tool for European Union countries to ensure full integration into their strategies and infrastructures, particularly in the context of lifelong learning. As KC cover
A great impact of ICT in educational processes is especially visible in physics teaching and learning. Physics is considered as a subject which main interest is directly and strongly connected not only to digital competence but also to several other Key Competences. During the meeting we will discuss the problem how these competences can be taught and how students can acquire them.

**Main Theme:** Key Competences in Physics Teaching and Learning

Domains:

- Researching formation of Key Competences in physics teaching and learning – new research approaches, new methods, innovative learning strategies, new models
- Key Competences changing pedagogy – formative assessment, teacher role, student role, KC oriented assessment, shared pedagogy, KC oriented pedagogy
- Developing of Key Competences – examples of good practices
- …

Highlighting these topics does not mean underestimating or neglecting other important aspects of physics education research and practice.

The Scientific Advisory Committee invites proposals for oral presentations, symposia, workshops and posters from a broad range of topics concerning different aspects of the essential knowledge, skills and attitudes related to physics teaching and learning.

Oral presentations are of 15 minutes duration, plus 5 minutes discussion time. Symposia provide an opportunity to examine one topic in depth preferably from different perspectives. Workshops give the opportunity for sharing a skill or approach with active engagement of the participants.
Deadline for submission of proposals:

1st round – 10th February 2015
2nd round – 30th March 2015

PROPOSALS MUST BE SUBMITTED ELECTRONICALLY THROUGH THE CONFERENCE WEB FORM AFTER REGISTRATION

Abstract submission

When submitting an oral presentation, a poster, a workshop or a symposium proposal, you will be required to submit an abstract ranging from 400 to 600 words via the registration site on Conference Web Page. The official language of the conference is English, so proposals should be sent and presented in this language. The preferred type of contribution is a poster.

The web address for the registration is:
http://girep2015.ifd.uni.wroc.pl/registration-form/
After the registration submit the abstract file using the address:
http://girep2015.ifd.uni.wroc.pl/login/

Guidelines for abstracts’ authors are available on the conference page in the section Downloads.

A pdf file, containing your complete paper, will be requested AFTER the Conference. We will keep you informed about the details.

During the registration process you will be asked to characterize the category of your contribution:

1. Oral presentation
2. Poster
3. Workshop
4. Symposium

Secondly you will be asked to classify your contribution in one of the following groups:

A. Research (physics education research, empirical as well as theoretical)
B. Research and development (including classroom ideas, practical issues, development etc. being more substantial than research)
C. Classroom ideas, teaching and learning practice (no or minimal research part)

We are aware that these groups are not strictly defined. However we believe that indicating the character of contributions can be useful both in reviewing abstracts and in dividing them into sessions.

Proposals reviewed/confirmed:
1st round – 10 March 2015
2nd round – 30th April 2015
**Review criteria**

Depending on the format and type of proposal, it will be reviewed by at least two reviewers, from countries that are different to those of the authors. Reviewers will work according to the criteria described below. The decision about the acceptance will be sent via e-mail in due time.

- For abstracts submitted during Period 1, the decisions about the acceptance of the contributions for the conference will be announced till 10th March 2015.
- For abstracts submitted during Period 2, the decisions about the acceptance will be announced till 30th April 2015.

The scientific committee will evaluate all submitted abstracts and provide feedback to the authors. The decision for accepting/rejecting a proposal will be based on evaluation results. Criteria for evaluation will take into account the following abstract characteristics:

- Title fully represents the proposal.
- Abstract focuses on what is new in the proposal.
- Abstract briefly explains the theoretical/conceptual framework.
- Abstract explains the aim and the research question or the main question.
- Abstract presents findings and results or notable ideas.
- Abstract gives a conclusion and implications.

**Deadline for registration:**

Early: 12th January – 14th February 2015
Late: 7th May – 15th June 2015

**Conference fee:**

- Early registration (to 14th February)
  GIREP & EPS members and AAPT members – 175 €
  Regular fee – 200 €
  Students fee – 120 €
  Accompanying person – 80 €

- Regular registration (from 11th February to 6th May)
  GIREP & EPS members and AAPT members – 200 €
  Regular fee – 225 €
  Students fee – 120 €
  Accompanying person – 80 €

- Late registration (from 7th May to 15th June)
  GIREP & EPS members and AAPT members – 225 €
  Regular fee – 250 €
  Students fee – 120 €
  Accompanying person – 80 €

The conference fee covers materials, welcome reception, lunches and coffee breaks. Accommodation, conference dinner and excursions are paid separately.
All conference activities, including registration, will take place at Haston City Hotel, ul. Irysowa 1-3, 51-117 Wrocław, Poland

Further details on electronic submission, registration and accommodation will be provided on the Conference Web Site: www.girep2015.ifd.uni.wroc.pl or through e-mail: girep@ifd.uni.wroc.pl

We are looking forward to meeting all of you in Wrocław.

On behalf of the Organizing Committee

Ewa Dębowska