



XIX International Symposium on Theoretical Electrical Engineering

July 16 – 19, 2017
Ilmenau, Germany



Organized by:

Technische Universität Ilmenau
Department of Electrical Engineering
and Information Technology
Advanced Electromagnetics Group



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Objectives

The biannual ISTET symposium series is devoted to research and education in theory and applications of electromagnetic fields, electrical and electronic circuits, signal processing, and design and control of electromagnetic systems.

Topics of the Symposium

- Electromagnetic fields
 - Fundamental aspects of field theory
 - Low and high frequency fields
 - Numerical algorithms
 - Optimization problems
- Circuit and system theory
 - Linear and nonlinear circuits
 - System theory
 - Nonlinear aspects of power systems
- Signal processing and identification
 - Advanced methods of signal processing
 - Mixed description of fields/circuits and signals
 - Signal processing algorithms
 - Nonlinear dynamics and signal processing
 - Classical and non-classical aspects in identification
 - Biomedical signal processing
- Theoretical concepts
 - Advanced mathematical concepts in networks and fields
 - Nonlinear control systems
 - Mathematical modeling aspects
 - Multivariable large-scale systems
- Applications
 - Nondestructive testing and evaluation
 - Smart magnetic materials
 - Microelectronic circuits
 - Mobile communication aspects
 - Control systems technology
 - Electrical drives and power systems
 - Electromagnetic compatibility
 - Sensors and actuators
- Innovative educational aspects
 - New ideas in teaching fields
 - Multimedia and internet aspects in education
 - Modern information science teaching

Previous ISTET Symposiums

The ISTET Symposium was founded by three outstanding experts in Theoretical Electrical Engineering: Prof. Oldrych Benda, Bratislava, Prof. Eugen Philippow, Ilmenau, and Prof. Kamo S. Demirtchyan, Moscow, in 1978 in Smolenice near Bratislava. The first symposium took place in 1981 in Bratislava and has been followed by conferences held in various parts of Europe:

- 1981 – Bratislava, Slovak Republic
- 1983 – Ilmenau, Germany
- 1985 – Moscow, Russia
- 1987 – Ilmenau, Germany
- 1989 – Budapest, Hungary
- 1991 – Cottbus, Germany
- 1993 – Szczecin, Poland
- 1995 – Thessaloniki, Greece
- 1997 – Palermo, Italy
- 1999 – Magdeburg, Germany
- 2001 – Linz, Austria
- 2003 – Warsaw, Poland
- 2005 – Lviv, Ukraine
- 2007 – Szczecin, Poland
- 2009 – Luebeck, Germany
- 2011 – Klagenfurt, Austria
- 2013 – Pilsen, Czech Republic
- 2015 – Kolobrzeg, Poland

Conference Proceedings

Authors are invited to submit electronically previously unpublished papers relevant to the symposium topics. These one page short papers will be reviewed. Authors of accepted short papers will be encouraged to submit a full version (max. 8 pages) of their paper by the end of the symposium. The papers will undergo a peer reviewing process. A number of papers will be selected for publication in the Special Issue 37/3 of *Compel (The International Journal for Computation and Mathematics in Electrical and Electronic Engineering)* in 2018. The special issue will have the title: “Special issue on Theoretical Electrical Engineering”. Another part of papers will be published in the journal “Informatics Control Measurement in Economy and Environment Protection” (*Informatyka Automatyka Pomiaru w Gospodarce i Ochronie Środowiska*, see www.e-IAPGOS.pl).

Working Language

English is the official language of the symposium and will be used for all printed material, presentations and discussions.

Young Researchers Poster Competition

A special session for students and PhD candidates is intended to be organized. Please put the name of the session in the category field when electronically submitting the short paper. The candidates interested in the competition have to provide a confirmation of their current student’s status.

Registration

The registration fee per participant (regular or student), including presentation of one paper, coffee breaks, welcome reception, gala dinner and conference material is as follows:

	Early Bird Rate before 12.05.2017	Late Registration after 12.05.2017
Regular participant	350 €	375 €
Student	200 €	225 €
Accompanying person	100 €	100 €

For accompanying person the welcome reception, coffee breaks and gala dinner is included in the fee. Additionally, there will be offered a post-conference excursion by bus to the Wartburg Castle at Eisenach on own expenses.

Additional paper fee (50 €/paper) will be applied only in case of those participants who paid single registration fee and will have more than one final paper accepted for publication. Further information can be found on the ISTET web page.

Short Paper Submission

Authors are invited to submit one page short paper. More details including a template can be found on the ISTET web page.

Important Dates

- March 31, 2017 – Deadline for short papers submission
- April 21, 2017 – Notification of short paper acceptance
- May 12, 2017 – Deadline for early registration
- July 16, 2017 – Conference opening
- July 19, 2017 – Full paper submission

Conference Venue & Accommodation

The symposium will be held at the campus of the Technische Universität Ilmenau. A number of hotel rooms with special rates will be reserved for the participants. Reservation can be made by using the reservation form available on the ISTET web page and submitting it via the conference management tool.

Due to the limited number of hotel rooms booked for the conference participants, the reservation should be made as soon as possible but no later than the **May 12, 2017**.

Travel to Ilmenau



By plane

Ilmenau can be reached via the airports Frankfurt/Main, Berlin, Leipzig/Halle or Erfurt-Weimar. From all these airports there are train connections (via Erfurt) to Ilmenau.

By train

There are a number of high speed train connections to the ICE main station at Erfurt (from airports: Frankfurt/Main – 230km, Berlin – 300km, Leipzig/Halle – 180km, Erfurt-Weimar – 40km). By regional trains from Erfurt you will reach Ilmenau within 50 minutes. Detailed information may be found at

https://www.bahn.de/p_en/view/index.shtml

By car

Ilmenau can be easily reached by car from east and west via motorways A4 and A71, and from north and south via A71. Parking area is available on the campus.

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