

THE CITY OF HAMBURG

Hamburg is one of the world's most beautiful cities. Furthermore, with around 1.9 million inhabitants, Hamburg is the second largest city in Germany.

The Port of Hamburg is one of the largest transshipment ports in the world and, together with the international airport, makes Hamburg an important logistics location.

The Speicherstadt and the neighboring Kontorhaus district are part of the UNESCO World Heritage Site. Other well-known highlights are the Hamburg City Hall and various churches. Many clinker brick facades and the numerous rivers and canals are typical for the city.

Furthermore, the St. Pauli entertainment district with the Reeperbahn and the Elbphilharmonie concert hall can be explored during the city tour.



Binnenalster during summer: www.mediaserver.hamburg.de

VENUE

The Helmut Schmidt University/University of the Federal Armed Forces Hamburg is a place of science. The university lives the idea of education through science. Like its founder and namesake, it sees science as “a search for knowledge that is committed to social responsibility”. The university is located in an international research landscape through competitive basic and applied research. The quality of their teaching arises from the free research activities of their academic members.

SOCIAL EVENT

During a guided tour the following locations will be visited: Reeperbahn, David Guard, boxing club ‘Zur Ritze’, Herbertstraße (of course only in front of it!), promenade to the harbour side with view to the Landungsbrücken, Portuguese Quarter and the Michel. The tour ends with a boat trip with buffet. It will be organised during the conference for all participants. Furthermore, a gala dinner with a nice view over Hamburg is planned.



SYMPOSIUM SITE

The technical program of the EPNC 2022 symposium will be held on the campus of Helmut Schmidt University.



Helmut Schmidt University - Photo: Reinhard Scheiblich

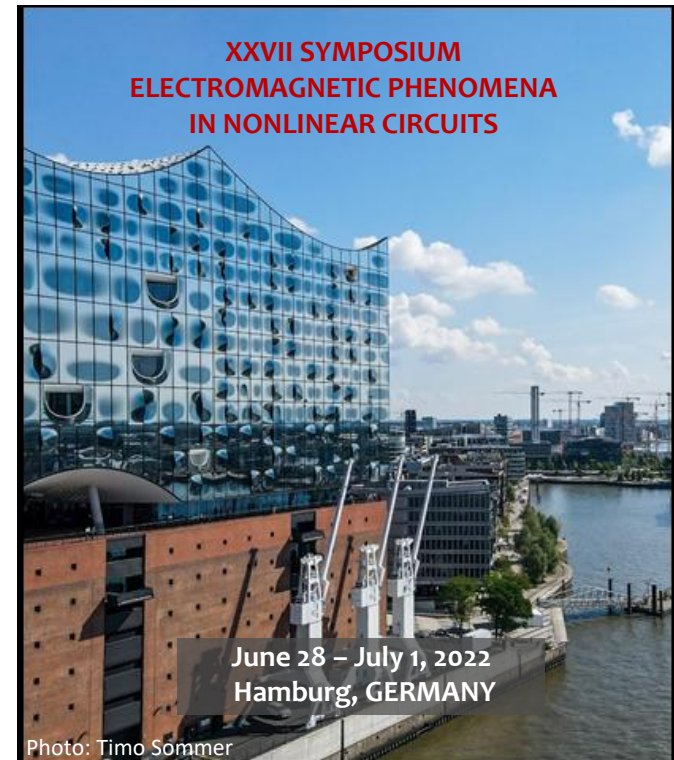
epnc2022.org



Announcement and first call for papers

EPNC 2022

XXVII SYMPOSIUM
ELECTROMAGNETIC PHENOMENA
IN NONLINEAR CIRCUITS



June 28 – July 1, 2022
Hamburg, GERMANY

Photo: Timo Sommer

ORGANIZED BY

Helmut Schmidt University,

Faculty of Electrical Engineering, Hamburg, Germany

Poznan University of Technology,

Faculty of Automatic Control, Robotics and Electrical Engineering, Poland

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* Corresponding member

INTERNATIONAL ORGANISING COMMITTEE

Christian Kreischer, **Conference Chair**

Johannes Liebrich, Technical and Advisory Committee

Lucas Steinacker, Technical and Advisory Committee

SCHEDULE OF EVENTS

February 18, 2022	Submission of 2 page papers
May 10, 2022	Final acceptance of 2-page papers
May 15, 2022	Final date for early registration
June 28 - July 1, 2022	Symposium Days
July 1, 2022	Submission of the extended papers

SCOPE

The aim of the Symposium EPNC 2022 is to present the recent advances in the analysis, synthesis, optimisation and inverse problems in nonlinear electromagnetics. The symposium provides a forum for discussion on applications of nonlinear phenomena in electrical engineering by field and circuit methods.

TOPICS

1. Nonlinear Coupled Electromagnetic Phenomena
 - Numerical Methods and Formulations
 - Multiphysics and Coupled Problems
2. Nonlinear Devices and Systems
 - Modelling and Control of Power Electronic Devices and Converters
 - Nonlinear Elements in Electrical Machines and Drives
3. Electromagnetics for Energy
 - Magnetic Materials and Passive Components for Power Electronics
 - Wireless Power Transfer
 - Renewable Energy Systems
4. Bioelectromagnetics
 - Modelling of biological interactions with electromagnetic fields
 - Human Exposure Modelling and Measurements
 - Electromagnetic Aspects in Medical Imaging
 - Therapeutic application of electromagnetic fields
5. Nonlinear Optics and Wave Propagation
 - Nonlinear Optical Phenomena and Devices
 - Modelling of Nonlinear Space-Time Electrodynamics
 - Modelling of Nonlinearities in Optical Waveguides

SUBMISSION OF PAPERS

Only original and unpublished papers will be presented at the Symposium. English will be the official language. The length of the papers is limited to 2 pages. All papers accepted for presentation will be published in the Symposium Proceedings. **Prospective authors are kindly invited to submit 2 page papers before February 18, 2022**, in PDF format, directly by submission form at conference website. The instruction for the preparation of paper is available on the symposium website. The manuscripts will be evaluated by reviewers.

EXTENDED PAPERS

The extended versions of selected papers will be published in a special issue of **COMPEL** 'The International Journal for Computation and Mathematics in Electrical and Electronic Engineering' Emerald, Bradford; the **Archives of Electrical Engineering** (AEE) journal. The authors of accepted papers will be invited to submit their extended papers by July 01, 2022.

Up to 30 papers in their extended version, prepared according to COMPEL editorial rules will be included in a Special Issue of COMPEL. Furthermore 20 papers will be published in the AEE journal. The extended versions will be subject to additional reviewing process.

SECRETARIAT

If you have questions, please contact us

Email: epnc@put.poznan.pl

Website: <http://epnc2022.org/>