



The Editorial Series on Accelerator Science: overview and perspectives

Editors: Maurizio Vretenar and Ryszard Romaniuk

3rd EuCARD Annual Meeting, University of Malta, UoM, 26-28 April 2016



EuCARD-2 is co-funded by the partners and the European Commission under Capacities 7th Framework Programme, Grant Agreement 312453



Why we publish?

- It was a great and quite novel idea (at the time of birth) to supplement European Accelerator Infrastructure Projects with publication of MONOGRAPHS apart from regular papers
- The idea was born during CARE, supported by TIARA, realized successfully by EuCARD, and is continued actively by EuCARD²
- Idea accepted not without some hesitation, as the topical projects are transient, and short lasting.
- Accelerator Science and Technology Monographs are included also in the ARIES Proposal . Hopefully will be continued!
- It is still not a very frequently used idea to publish monographs with the EU Projects, Who knows other project which publishes?

Nearing to 40 volumes

- Risky? Beginning but today a great result
- Let us continue this quite considerable success
- First volume published in 2008

What we publish?

- Research & Technical Monographs
- Ph.D. Theses
- Very good M.Sc. Theses
- Ordered/polished laboratory reports
- Interim TDRs
- WP results summaries
- What else?

Bartłomiej Juszczak
Grzegorz Kasprówicz

MicroTCA Based Platform for Advanced Particle Accelerators Diagnostics



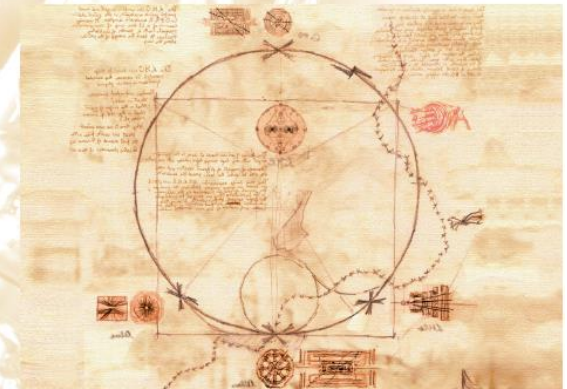
Editorial Series on ACCELERATOR SCIENCE

Institute of Electronic Systems
Warsaw University of Technology



José Luis Abelleira Fernández

Optics Designs of Final-Focus Systems for Future LHC Upgrades



Editorial Series on ACCELERATOR SCIENCE

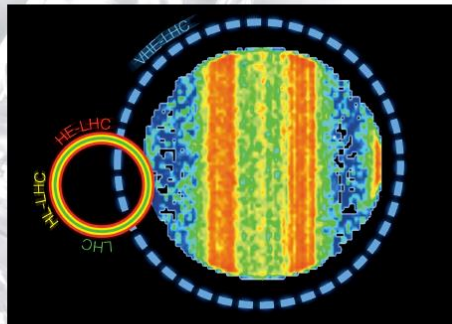


Institute of Electronic Systems
Warsaw University of Technology



César Octavio Domínguez Sánchez de la Blanca

Electron Cloud Studies for the LHC and Future Proton Colliders



Editorial Series on ACCELERATOR SCIENCE

Publications of the Warsaw University of Technology Publishing House (OWPW — Ołcyna Wydawnicza Politechniki Warszawskiej) and its publication catalogues are available in most technical-scientific bookshops in Poland, as well as in reading rooms and libraries of universities.

The full offer of our publications is presented on the Internet at <http://www.wydawnictwopw.pl>

The Warsaw University of Technology Publishing House offers also mail-order sale (national and international deliveries)

phone 48 22-234-75-03
fax 48 22-234-70-60
e-mail: oflcyna@wpw.pw.edu.pl



Hardware Implementation of the Track Identification Algorithm in the Scalable Readout System for the TOTEM Experiment

Adrian Fiergolski

Hardware Implementation of the Track Identification Algorithm in the Scalable Readout System for the TOTEM Experiment



Editorial Series on ACCELERATOR SCIENCE



Institute of Electronic Systems
Warsaw University of Technology

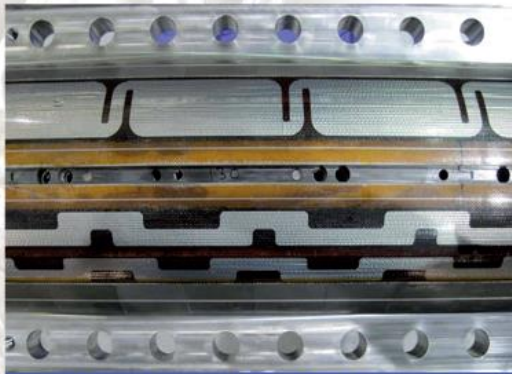


Institute of Electronic Systems
Warsaw University of Technology



Tiina Salmi

Optimization of Quench Protection Heater Performance in High-Field Accelerator Magnets Through Computational and Experimental Analysis



Editorial Series on ACCELERATOR SCIENCE

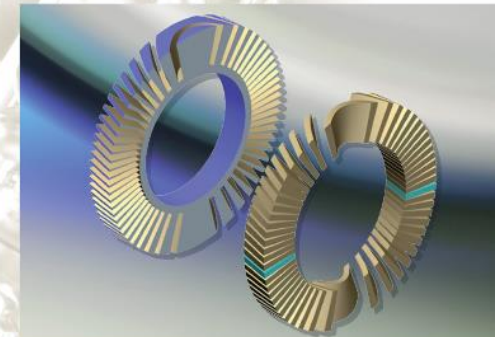


Institute of Electronic Systems
Warsaw University of Technology



Lucas Nathan Brouwer

Canted-Cosine-Theta Superconducting Accelerator Magnets for High Energy Physics and Ion Beam Cancer Therapy



Editorial Series on ACCELERATOR SCIENCE



Institute of Electronic Systems
Warsaw University of Technology



Marija Cauchi

Thermo-Mechanical Studies of Large Hadron Collider Collimators in Accident Scenarios



Editorial Series on ACCELERATOR SCIENCE



Institute of Electronic Systems
Warsaw University of Technology



Thomas Flisgen

Compact State-Space Models for Complex Superconducting Radio-Frequency Structures Based on Model Order Reduction and Concatenation Methods



Editorial Series on ACCELERATOR SCIENCE



Institute of Electronic Systems
Warsaw University of Technology



Marcello Spera

Pinning Mechanisms in YBCO Tapes



Editorial Series on ACCELERATOR SCIENCE

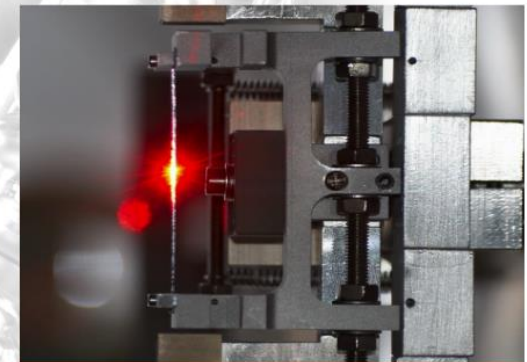


Institute of Electronic Systems
Warsaw University of Technology



Daniele Mirarchi

Crystal Collimation for LHC

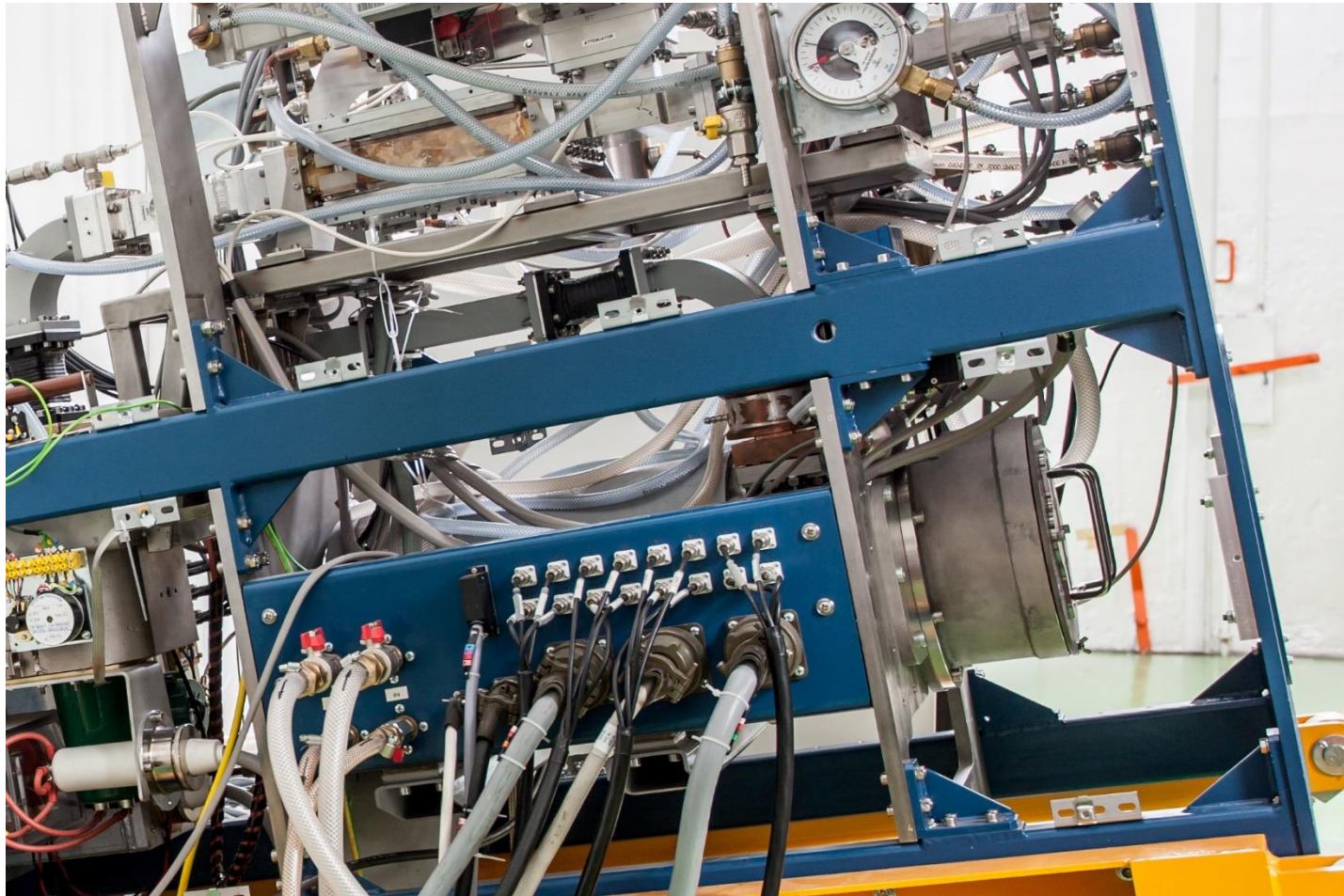


Editorial Series on ACCELERATOR SCIENCE



Institute of Electronic Systems
Warsaw University of Technology







Published booklets

- Vol.28 – Bartek Juszczak, Grzegorz Kasproicz, MicroTCA Based Platform for Advanced Particle Accelerators Diagnostics
- Vol.27 – Adrian Fiergolski, Hardware Implementation of the Track Identification Algorithm in the Scalable Readout System for the TOTEM Experiment
- Vol.26 – Michal Koziel, Development of Radiation Hardened Pixel Sensors for Charged Particle Detection
- Vol.25 – Ben Hall, Designing the Four Rod Crab Cavity for the High-Luminosity LHC Upgrade
- Vol 24 – Jose L.A.Fernandez, Optics Designs of Final-Focus Systems for Future LHC Upgrades
- Vol 23 – Cesar O. D. Sanchez, Electron Cloud Studies for the LHC and Future Proton Colliders
- Vol 22 – Jean-Pierre Koutchouk, Agnes Szeberenyi, EuCARD Final Project Report
- Vol 21 – Tomasz Plawski, Digital RF Control System for Superconducting Cavity with Large Lorentz Force Detuning Coefficient
- Vol 20 – Maciej Kwiatkowski, Methods for the Application of Programmable Logic Devices in Electronic Protection Systems for High Energy Particle Accelerators
- Vol.19 – Gianluca Valentino, Fast Automatic Beam Based Alignment of the LHC Collimator Jaws

Most of the EuCARD² Booklets are PhD Theses

- Vol.38 –
- Vol.37 – Slawomir Wronka, Interlaced Energy linac with smooth Energy regulation
- Vol.36 – Lucas N. Brouwer, Canted-Cosine-Theta Superconducting Accelerator Magnets for High Energy Physics and Ion Beam Cancer Therapy
- Vol.35 – Nicholas C. Shipman, Experimental study of DC vacuum breakdown and application to high-gradient accelerating structures for CLIC
- Vol 34 – Tiina Salmi, Optimization of quench protection heater performance in high-field accelerator magnets through computational and experimental analysis
- Vol 33 – Thomas Flisgen, Compact State-Space Models for Complex Superconducting Radio-Frequency Structures Based on Model Order Reduction and Concatenation Methods
- Vol 32 – Marija Cauchi, Thermo-Mechanical Studies of Large Hadron Collider Collimators in Accident Scenarios
- Vol 31 – Danielle Mirarchi, Crystal Collimation for LHC
- Vol 30 – Grzegorz Korcyl, A Novel Data Acquisition System Based on Fast Optical Links and Universal Readout Boards
- Vol.29 – Marcello Spera, Pinning mechanisms in YBCO tapes

Most of the EuCARD² Booklets are PhD Theses; Pages: 100 – 250



Planned booklets

- Femtosecond level synchronization issues in accelerators
- High temperature superconductors for high field magnets
- Accelerator Applications
- Novel SRF technologies
- Accelerator measurements and instrumentation
- Proceedings of some EuCARD-2 Networking Workshops?
- More PhD Theses associated with EuCARD²
- Other: ARIES related, APAE initiative, ESS, FCC,

Please consider documenting the EuCARD² Networking with Booklet Proceedings

Do not wait till the end of the Project. Think of publishing the EuCARD2 booklet now

- Booklets (printed copies) sent to all institutional EuCARD² Members (and Authors)
- Booklets available in pdf format via CERN-CDS
- EuCARD² results webpage:
<http://eucard2.web.cern.ch/science/monographs>
- Print on demand: available via the WUT Publisher

- Please express your willingness to publish a monograph to Maurizio, Ryszard, Julia, Jennifer, your WP Leader, ...!
- Be prepared with, or announce a readiness time with a pdf file of the monograph
- The rest is to the editors

- Please think of publishing a booklet within the EuCARD-2 Editorial Series on Accelerator Science
- Booklets/monographs add a new and nice dimension to the project achievements and reporting – internal and external
- If successful, this idea may be adopted by some other projects (continued hopefully with ARIES !)
- Ryszard.Romaniuk@cern.ch

**There is a chance to go
together for an absolute record
inside the European Projects
with this exceptional number
of very high quality scientific
monographs**



Thank you

Publishing EuCARD² Monographs is a great idea