

# Topical Workshop on Electronics for Particle Physics

## TWEPP-21

### Oral Presentation Award

**The Gotthard-II readout ASIC and  
detector system**

**Presenter: J. Zhang**

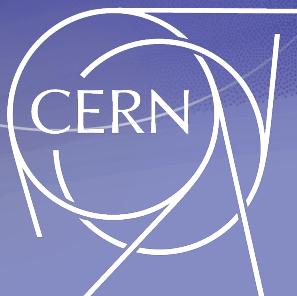
Authors: M. Andrae<sup>1</sup>, R. Barten<sup>1</sup>, A. Bergamaschi<sup>1</sup>,  
M. Brückner<sup>1</sup>, S. Chiriotti Alvarez<sup>1</sup>, R. Dinapoli<sup>1</sup>, E. Froejdh<sup>1</sup>,  
D. Greiffenberg<sup>1</sup>, P. Kozlowski<sup>1</sup>, M. Kuster<sup>2</sup>, C. Lopez-Cuenca<sup>1</sup>,  
M. Meyer<sup>1</sup>, D. Mezza<sup>1</sup>, A. Mozzanica<sup>1</sup>, M. Ramilli<sup>2</sup>, C. Ruder<sup>1</sup>,  
B. Schmitt<sup>1</sup>, X. Shi<sup>1</sup>, D. Thattil<sup>1</sup>, G. Tinti<sup>1</sup>, M. Turcato<sup>1</sup>, S. Vetter<sup>1</sup>,  
J. Zhang<sup>1</sup>

<sup>1</sup>Paul Scherrer Institut, Switzerland

<sup>2</sup>European XFEL GmbH, Germany

Alexander Blug

Scientific  
Committee Chair



24 September  
2021

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### Oral Presentation Award

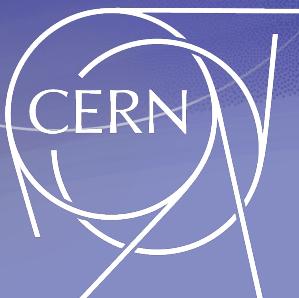
**Installation, integration and first  
operating experiences of the  
ALICE ITS Upgraded Readout  
System**

Presenter: Ola Slettevoll Groettvik

CERN, Switzerland

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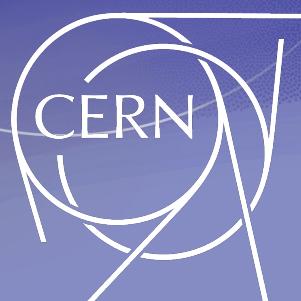
CMS HCAL VTRx-induced  
communication loss and  
mitigation

Presenter: Grace Cummings

University of Virginia, United States

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### Oral Presentation Award

A Sub-Picosecond Digitally-  
Controlled Phase Delay

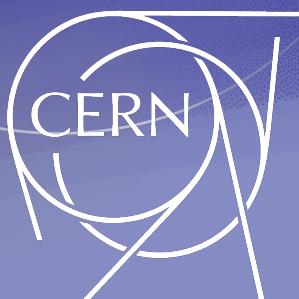
Presenter: Prof. Y. Tousi

Authors: D. Dehmeshki, E. Frahm,  
R. Rusack, R. Saradhy,  
Y. Tousi

University of Minnesota, United States

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### Oral Presentation Award

**Front-end hybrid designs for the  
CMS Phase-2 Upgrade towards the  
production phase**

Presenter: Mark Istvan Kovacs

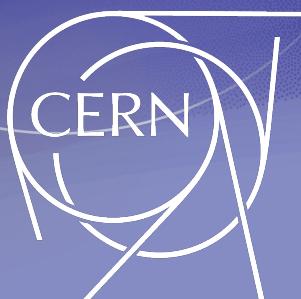
Authors: G. Blanchot<sup>1</sup>, I. Mateos Dominguez<sup>1</sup>,  
T. Gadek<sup>2</sup>, A. Erik Hollos<sup>1</sup>, M. Kovacs<sup>1</sup>,  
A. Zografos<sup>1</sup>

<sup>1</sup>CERN, Switzerland

<sup>2</sup>ETH Zürich, Switzerland

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## TWEPP-21

### Oral Presentation Award

**HGCROC3: the front-end readout ASIC for the  
CMS High Granularity Calorimeter**

Presenter: Frederic Dulucq

Authors: A. El Berni<sup>2</sup>, F. Boujou<sup>3</sup>, F. Dulucq<sup>2</sup>, S. Extier<sup>2</sup>,  
M. Idzik<sup>4</sup>, A. Marchioro<sup>1</sup>, A. Molenda<sup>4</sup>, J. Moron<sup>4</sup>, C. De La Taille<sup>2</sup>,  
D. Thienpont<sup>2</sup>

<sup>1</sup> CERN, Switzerland

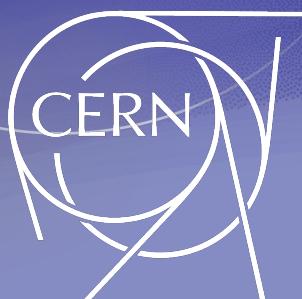
<sup>2</sup> CNRS/IN2P3, France

<sup>3</sup> Université Paris-Saclay, France

<sup>4</sup> University of Science and Technology, Poland

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### Oral Presentation Award

**First Measurement on TimeSPOT1 ASIC:  
a Fast-Timing, High-Rate Pixel-Matrix Front-End**

Presenter: Lorenzo Piccolo

Authors: S. Cadeddu<sup>2</sup>, L. Frontini<sup>3</sup>, A. Lai<sup>2</sup>, V. Liberali<sup>3</sup>, L. Piccolo<sup>3</sup>,  
A. Rivetti<sup>4</sup>, A. Stabile<sup>3</sup>

<sup>1</sup> INFN Torino, Italy

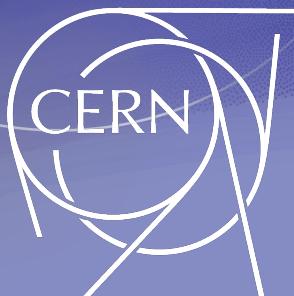
<sup>2</sup> Università and INFN Cagliari, Italy

<sup>3</sup> Università degli Studi di Milano, Italy

<sup>4</sup> Università and INFN Torino, Italy

Alessandro Mazzoni

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### Oral Presentation Award

**48V input rad-hard DCDC converters for HEP experiments: development and results**

Presenter: Pablo Daniel Antosczuk

Authors:

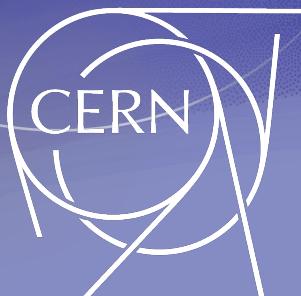
P. Antosczuk<sup>1</sup>, F. Iob<sup>2</sup>, S. Michelis<sup>1</sup>, G. Ripamonti<sup>1</sup>, S. Saggini<sup>2</sup>

<sup>1</sup> CERN, Switzerland

<sup>2</sup> University of Udine, Italy

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### Oral Presentation Award

**The Ocean and Octopus designs for the  
Phase-2 upgrade of the CMS L1 muon trigger**

Presenter: Michail Bachtis

Authors:

M. Bachtis, J. Jones, M. Tepper

University of California Los Angeles, United States

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### Poster Presentation Award

**Radiation hardness of the ITkPixV1 and  
RD53A chips**

Presenter: Maria Mironova

University of Oxford, United Kingdom

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### Poster Presentation Award

**Event driven readout system with non-priority arbitration for radiation detectors**

Presenter: Dominik Górní

Authors:

G. Carini, G. Deptuch, D. Górní, A. Kuczewski, S. Miryala,  
A. Rumaiz, D. Siddons

Brookhaven National Laboratory, United States

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### Poster Presentation Award

**QTIA, a 2.5 or 10 Gbps 4-Channel Array Optical Receiver ASIC in a 65 nm CMOS Technology**

Presenter: Hanhan Sun

Authors:

H. Sun<sup>7</sup>, X. Huang<sup>7</sup>, C.-P. Chao<sup>2</sup>, S.-W. Chen<sup>2</sup>, B. Deng<sup>6</sup>, D. Gong<sup>7</sup>,  
S. Hou<sup>1</sup>, G. Huang<sup>4</sup>, S. Kulis<sup>3</sup>, C.-Y. Li<sup>2</sup>, C. Liu<sup>7</sup>, T. Liu<sup>7</sup>,  
P. Simoes Moreira<sup>3</sup>, Q. Sun<sup>5</sup>, J. Ye<sup>7</sup>, L. Zhang, W. Zhang<sup>7</sup>

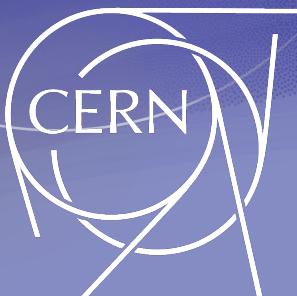
<sup>1</sup>Academia Sinica, <sup>2</sup>APAC Opto Electronics Inc., <sup>3</sup>CERN,

<sup>4</sup>Central China Normal University, <sup>5</sup>Fermi National Accelerator Lab.,

<sup>6</sup>Hubei Polytechnic University, <sup>7</sup>Southern Methodist University

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### Poster Presentation Award

**The ATLAS Electron Feature Extractor Module:  
Design, Manufacture and Test**

Presenter: Saeed Taghavirad

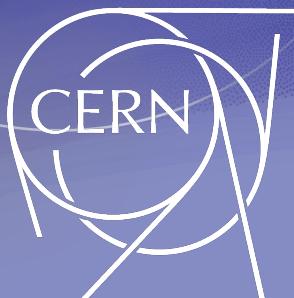
Authors:

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Science and Technology Facilities Council STFC, United Kingdom

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### Poster Presentation Award

**The new waveform digitizer (DIRAC-V2) for the Mu2e  
electromagnetic calorimeter at Fermilab**

Presenter: Elena Pedreschi

#### Authors:

F. Cervelli, S. Ceravolo, G. Corradi, S. Di Falco, E. Diociaiuti, S. Donati, A. Gioiosa, S. Giovannella, F. Happacher, S. Miscetti, M. Martini, L. Morescalchi, D. Pasciuto, F. Raffaelli, I. Sarra, F. Spinella, N. Atanov, A. Taffara

INFN Pisa, Italy,  
INFN Frascati, Italy

Joint Institute for Nuclear Research, Russia  
Universita' e Scuola Normale Superiore, Italy  
Universita Pisa, Italy

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### Poster Presentation Award

**The Versatile Link+ Demo Board (VLDB+)**

Presenter: Daniel Hernandez Montesinos

Authors:

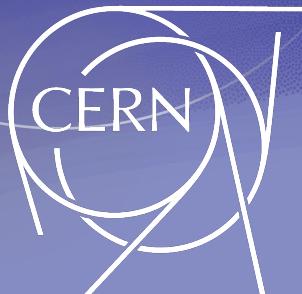
S. Baron<sup>1</sup>, N. El Houda Guettouche<sup>2</sup>, J. Mendez<sup>1</sup>,  
D. Hernandez Montesinos<sup>1</sup>

<sup>1</sup> CERN, Switzerland

<sup>2</sup> CNRS, France

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### Poster Presentation Award

**Test system for the Service Hybrid of the 2S  
Module for the CMS Phase-2 Outer Tracker  
Upgrade**

Presenter: Alexander Josef Pauls

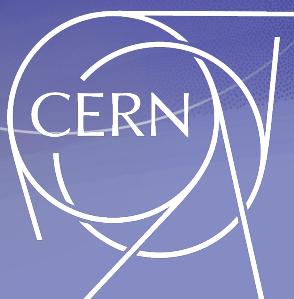
Authors:

C. Dziewok, L. Feld, W. Karpinski, K. Klein, M. Lipinski, D. Louis, I. Özen, A. Pauls, O. Pooth, M. Wlochal

RWTH Aachen University, Germany

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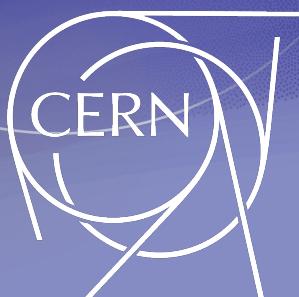
<sup>1</sup> CERN, Switzerland

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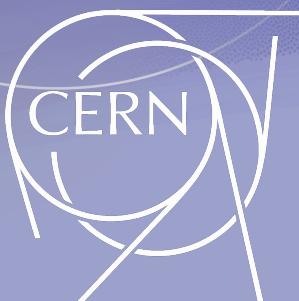
<sup>1</sup> CERN, Switzerland

<sup>2</sup> CNRS/IN2P3, France

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<sup>1</sup>Paul Scherrer Institut, Switzerland

<sup>2</sup> European XFEL GmbH, Germany

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### Oral Presentation Award

The title of the presentation

**Z. Author<sup>1</sup>, B. Author<sup>2</sup>, C. Author<sup>3</sup>**

<sup>1</sup>CERN, Geneva

<sup>2</sup> Institute for High Energy Physics, Gross Enzersdorf

<sup>3</sup>University of Physics, Zell am See



24 September, 2021

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Date

# Topical Workshop on Electronics for Particle Physics

## TWEPP2021

### Oral Presentation Award

The title of the presentation

**Z. Author<sup>1</sup>, B. Author<sup>2</sup>, C. Author<sup>3</sup>**

<sup>1</sup>CERN, Geneva

<sup>2</sup> Institute for High Energy Physics, Gross Enzersdorf

<sup>3</sup>University of Physics, Zell am See

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