

1st CERN Baltic Conference (CBC 2021)

Report of Contributions

Contribution ID: 2

Type: **not specified**

HERTIS Collaboration

Wednesday 30 June 2021 09:15 (15 minutes)

Author: Prof. TORIMS, Toms (Riga Technical University (LV))

Co-authors: PIKURS, Guntis (Riga Technical University (LV)); KRAVALIS, Kalvis (Riga Technical University); Ms RUSE, Aija (Riga Technical University)

Presenter: Prof. TORIMS, Toms (Riga Technical University (LV))

Session Classification: Accelerator Technologies & Societal Applications

Track Classification: Accelerators & Advanced Technologies: Societal applications

Contribution ID: 3

Type: **not specified**

A review of elemental mass origin and fundamental forces unification

Tuesday 29 June 2021 14:45 (15 minutes)

Author: Mr HUSSAIN, Abrar (Tallinn University of Technology)

Co-authors: Dr PODGURSKY, Vitali (Tallinn University of Technology); Dr VILJUS, Mart (Tallinn University of Technology); Dr GOLJINDIN, dmitri (Tallinn University of Technology); Dr ANTONOV, Maksim (Tallinn University of Technology); Mr SHAIKH, Asad Alamgir (Tallinn University of Technology)

Presenter: Mr HUSSAIN, Abrar (Tallinn University of Technology)

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: 4

Type: **not specified**

RTU engineering engagement in CMS Technical Integration and BTL

Wednesday 30 June 2021 16:55 (15 minutes)

Author: PIKURS, Guntis (Riga Technical University (LV))

Co-authors: Dr DREIMANIS, Karlis (Riga Technical University (LV)); Prof. TORIMS, Toms (Riga Technical University (LV))

Presenter: PIKURS, Guntis (Riga Technical University (LV))

Session Classification: Advanced Technologies: Detectors

Track Classification: Detectors: CMS

Contribution ID: 6

Type: **not specified**

Particle Physics teaching at Vilnius University

Monday 28 June 2021 16:15 (10 minutes)

Author: GAJDOSIK, Thomas (Vilnius University (LT))

Presenter: GAJDOSIK, Thomas (Vilnius University (LT))

Session Classification: National Activities and Education

Contribution ID: 7

Type: **not specified**

SEMICONDUCTOR AND SCINTILLATION MATERIALS FOR RADIATION DETECTORS

Monday 28 June 2021 14:20 (10 minutes)

Author: Mrs BULYCHEVA, Anna (Baltic Scientific Instruments)

Presenter: Mrs BULYCHEVA, Anna (Baltic Scientific Instruments)

Session Classification: Industry Engagement and R&D

Track Classification: Industry engagement and R&D: Detectors

Contribution ID: 8

Type: **not specified**

Radioactive Waste Monitoring in Nuclear Industry

Monday 28 June 2021 14:40 (10 minutes)

Author: Mr POHULIAI, Serhii (Baltic Scientific Instruments)

Presenter: Mr POHULIAI, Serhii (Baltic Scientific Instruments)

Session Classification: Industry Engagement and R&D

Track Classification: Industry engagement and R&D: General

Contribution ID: 9

Type: **not specified**

Additive Manufacturing Applications for Accelerator Technologies

Wednesday 30 June 2021 11:30 (15 minutes)

Author: RATKUS, Andris (Riga Technical University (LV))

Co-authors: Prof. TORIMS, Toms; Mr PIKURS, Guntis

Presenter: RATKUS, Andris (Riga Technical University (LV))

Session Classification: Advanced Technologies: Accelerators

Track Classification: Accelerators & Advanced Technologies: Advanced technological solutions

Contribution ID: **10**

Type: **not specified**

Gantry Design for the Heavy-Ion Therapy Medical Application

Wednesday 30 June 2021 10:00 (15 minutes)

Author: RATKUS, Andris (Riga Technical University (LV))

Co-authors: Prof. TORIMS, Toms; Mr VILCANS, Jānis

Presenter: RATKUS, Andris (Riga Technical University (LV))

Session Classification: Accelerator Technologies & Societal Applications

Track Classification: Accelerators & Advanced Technologies: Societal applications

Contribution ID: 11

Type: **not specified**

Quintessence in a Trap

Tuesday 29 June 2021 12:15 (15 minutes)

Author: KARCIAUSKAS, Mindaugas (Universidad Complutense de Madrid)

Presenter: KARCIAUSKAS, Mindaugas (Universidad Complutense de Madrid)

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: 12

Type: **not specified**

Improvement of Mechanical and Magnetic Properties of Nb/Cu Structure by Laser Radiation for SRF Applications

Wednesday 30 June 2021 15:00 (15 minutes)

Authors: Prof. MEDVIDS, Arturs (Riga Technical University); Dr ONUFRIJEVS, Pavels (Riga Technical University); MALYSHEV, Oleg (STFC Daresbury Laboratory); VALIZADEH, Reza (STFC Daresbury Laboratory); TURNER, Daniel; RIES, Rastislav; SEILER, Eugen (IEE Slovak Academy of Sciences); GÖMÖRY, Fedor (Slovak Academy of Sciences); PIRA, Cristian (LNL-INFN); CHYHYRYNETS, Eduard (INFN - National Institute for Nuclear Physics); Dr ŽUNDA, Audrius; PADGURSKAS, Juozas

Presenter: Prof. MEDVIDS, Arturs (Riga Technical University)

Session Classification: Advanced Technologies: Materials

Track Classification: Accelerators & Advanced Technologies: Advanced technological solutions

Contribution ID: 13

Type: **not specified**

High density QCD matter in hadron collisions

Tuesday 29 June 2021 16:30 (15 minutes)

Author: Dr MAZELIAUSKAS, Aleksas (CERN)

Presenter: Dr MAZELIAUSKAS, Aleksas (CERN)

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: 14

Type: **not specified**

CMS HL-LHC Tracker Upgrade

Wednesday 30 June 2021 16:40 (15 minutes)

Author: RINKEVICIUS, Aurelijus (Vilnius University (LT))

Presenter: RINKEVICIUS, Aurelijus (Vilnius University (LT))

Session Classification: Advanced Technologies: Detectors

Track Classification: Detectors: CMS

Contribution ID: 15

Type: **not specified**

LIEBE loop hydraulic parameter determination

Wednesday 30 June 2021 11:00 (15 minutes)

Authors: Mr BOIX, Ferran (Materials Engineer Trainee en CERN); KRAVALIS, Kalvis (University of Latvia, Institute of Physics); Dr BUCENIEKS, Imants (Senior Researcher, University of Latvia, Institute of Physics); Dr BULIGINS, Leonids (Director of Institute of Physics of University of Latvia); Dr GOLDSTEINS, Linards (University of Latvia, Institute of Physics, Senior Researcher); Dr DELONCA, Melanie (Head Of Business Development Drive Technology); Dr STORA, Thierry (CERN, Senior physicist)

Presenter: KRAVALIS, Kalvis (University of Latvia, Institute of Physics)

Session Classification: Advanced Technologies: Accelerators

Track Classification: Accelerators & Advanced Technologies: MEDICIS

Contribution ID: 16

Type: **not specified**

The $Zb\bar{b}$ couplings in models with extended Higgs sectors

Tuesday 29 June 2021 16:15 (15 minutes)

Authors: JURCIUKONIS, Darius (Vilnius University (LT)); Dr LAVOURA, Luis (CFTP-ULisboa)

Presenter: JURCIUKONIS, Darius (Vilnius University (LT))

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: 17

Type: **not specified**

Assessment of Concrete Core and Seating Mortar Samples from CERN UXC55 Cavern Base Slab & Joint studies of Specialist Concrete in view of Radiation Protection Aspects

Monday 28 June 2021 12:10 (10 minutes)

Author: CEPURITIS, Rolands (Primekss SIA)

Presenter: CEPURITIS, Rolands (Primekss SIA)

Session Classification: Industry Engagement and R&D

Track Classification: Industry engagement and R&D: Detectors

Contribution ID: **18**

Type: **not specified**

Connection between tadpole renormalization and gauge dependences

Tuesday 29 June 2021 14:30 (15 minutes)

Author: DŪDĖNAS, Vytautas (Vilnius University (LT))

Co-author: Dr LÖSCHNER, Maximilian (Institute for Theoretical Physics, Karlsruhe Institute for Technology)

Presenter: DŪDĖNAS, Vytautas (Vilnius University (LT))

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: 19

Type: **not specified**

Untangling the spin of a dark boson in Z decays

Tuesday 29 June 2021 16:00 (15 minutes)

Author: Dr GABRIELLI, Emidio (Nat. Inst. of Chem.Phys. & Biophys. (EE))

Presenter: Dr GABRIELLI, Emidio (Nat. Inst. of Chem.Phys. & Biophys. (EE))

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: 20

Type: **not specified**

Pseudo-Goldstone dark matter: gravitational waves and direct-detection blind spots

Tuesday 29 June 2021 12:00 (15 minutes)

Authors: TUOMINEN, Kimmo (University of Helsinki); KANNIKE, Kristjan (National Institute of Chemical Physics and Biophysics (EE)); HEIKINHEIMO, Matti (Helsinki Institute of Physics); BENINCASA, Nico (National Institute of Chemical Physics and Biophysics (EE)); KOIVUNEN, Niko (University of Helsinki); ALANNE, Tommi (University of Liverpool); KEUS, Venus (University of Helsinki)

Presenter: BENINCASA, Nico (National Institute of Chemical Physics and Biophysics (EE))

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: 21

Type: **not specified**

Cosmic ray tomography: from medical research to security applications

Wednesday 30 June 2021 09:00 (15 minutes)

Author: HEKTOR, Andi (National Institute of Chemical Physics and Biophysics (EE))

Presenter: HEKTOR, Andi (National Institute of Chemical Physics and Biophysics (EE))

Session Classification: Accelerator Technologies & Societal Applications

Track Classification: Accelerators & Advanced Technologies: Societal applications

Contribution ID: 22

Type: **not specified**

High voltage, high frequency, high bandwidth sweeping arbitrary waveform challenge solution

Wednesday 30 June 2021 12:00 (15 minutes)

Authors: APSE-APSITIS, Peteris (Riga Technical university); Dr STEIKS, Ingars (Riga Technical university)

Co-authors: Dr MEUSEL, Oliver (Institute of Applied Physics Goethe University Frankfurt); Dr DROBA, Martin (Institute of Applied Physics Goethe University Frankfurt); Dr ONDREKA, David (GSI Darmstadt); Dr KATHRIN, Schulte-Ulrichs (GSI Darmstadt)

Presenter: APSE-APSITIS, Peteris (Riga Technical university)

Session Classification: Advanced Technologies: Accelerators

Track Classification: Accelerators & Advanced Technologies: Advanced technological solutions

Contribution ID: 23

Type: **not specified**

CLOUD experiment - climate research at CERN

Tuesday 29 June 2021 09:55 (15 minutes)

Author: Prof. JUNNINEN, Heikki (University of Tartu)

Co-authors: Mr KOEMETS, Paap (University of Tartu/Airel AS); Dr SANDER, Mirme (University of Tartu/Airel AS)

Presenter: Prof. JUNNINEN, Heikki (University of Tartu)

Session Classification: High Energy Physics & Atomic Physics: Experiment

Track Classification: High Energy Physics & Atomic Physics: CLOUD

Contribution ID: 24

Type: **not specified**

Overview of Research on scintillator materials in Latvia: past, present, and future

Wednesday 30 June 2021 16:00 (15 minutes)

Author: POPOV, Anatoli (University of Latvia (LV))

Presenter: POPOV, Anatoli (University of Latvia (LV))

Session Classification: Advanced Technologies: Materials

Track Classification: Detectors: CCC

Contribution ID: 25

Type: **not specified**

Development of molecular ion beams for extraction and mass-separation of $^{43,44g,47}\text{Sc}$ radioisotopes from irradiated natural titanium targets at the CERN-MEDICIS facility

Tuesday 29 June 2021 11:30 (15 minutes)

Author: Mr MAMIS, Edgars (University of Latvia (LV))

Co-authors: STORA, Thierry (CERN); ROTHE, Sebastian (CERN); DUCHEMIN, Charlotte (CERN EN/STI/RBS); PAJUSTE, Elina (University of Latvia (LV)); RADZINA, Maija (Riga Stradins University)

Presenter: Mr MAMIS, Edgars (University of Latvia (LV))

Session Classification: High Energy Physics & Atomic Physics: Experiment

Track Classification: Accelerators & Advanced Technologies: MEDICIS

Contribution ID: 26

Type: **not specified**

A fakeon doublet solution to the muon $g-2$

Tuesday 29 June 2021 14:15 (15 minutes)

Author: MELIS, Aurora (National Institute of Chemical Physics and Biophysics (EE))

Co-authors: ANSELMINI, DAMIANO; RAIDAL, Martti (National Institute of Chemical Physics and Biophysics (EE)); MARZOLA, Luca (National Institute of Chemical Physics and Biophysics (EE)); PIVA, Marco (NICPB, Tallinn); MÜÜRSEPP, Kristjan (National Institute of Chemical Physics and Biophysics (EE)); KANNIKE, Kristjan (National Institute of Chemical Physics and Biophysics (EE))

Presenter: MELIS, Aurora (National Institute of Chemical Physics and Biophysics (EE))

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: 27

Type: **not specified**

The radiosensitizer potential of resveratrol on MDA-MB-231 breast cancer cell line

Wednesday 30 June 2021 10:15 (15 minutes)

Author: LAUKAITIENĖ, Danguolė (Lithuanian University of Health Sciences)

Co-authors: Mrs SAVUKAITYTĖ, Aistė (Oncology Institute, Lithuanian University of Health Sciences, Kaunas, Lithuania); Ms BARTNYKAITĖ, Agnė (Oncology Institute, Lithuanian University of Health Sciences, Kaunas, Lithuania); Prof. INČIŪRA, Arturas (Oncology Institute, Lithuanian University of Health Sciences, Kaunas, Lithuania); Prof. JUOZAITYTĖ, Elona (Oncology Institute, Lithuanian University of Health Sciences, Kaunas, Lithuania); Prof. UGENSKIENĖ, Rasa (Oncology Institute, Lithuanian University of Health Sciences, Kaunas, Lithuania)

Presenters: LAUKAITIENĖ, Danguolė (Lithuanian University of Health Sciences); Ms BARTNYKAITĖ, Agnė (Oncology Institute, Lithuanian University of Health Sciences, Kaunas, Lithuania)

Session Classification: Accelerator Technologies & Societal Applications

Track Classification: Accelerators & Advanced Technologies: Societal applications

Contribution ID: **28**

Type: **not specified**

Fakeons and particle phenomenology

Tuesday 29 June 2021 14:00 (15 minutes)

Author: PIVA, Marco (NICPB, Tallinn)

Co-authors: MELIS, Aurora; ANSELMINI, DAMIANO; KANNIKE, Kristjan (National Institute of Chemical Physics and Biophysics (EE)); MARZO, Carlo (NICPB); MARZOLA, Luca (National Institute of Chemical Physics and Biophysics (EE)); MÜÜRSEPP, Kristjan (National Institute of Chemical Physics and Biophysics (EE)); RAIDAL, Martti (National Institute of Chemical Physics and Biophysics (EE))

Presenter: PIVA, Marco (NICPB, Tallinn)

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: 29

Type: **not specified**

The origin of quark flavour observables and the stability of the electroweak vacuum in the context of radiative Yukawa couplings

Tuesday 29 June 2021 15:45 (15 minutes)

Author: MÜÜRSEPP, Kristjan (National Institute of Chemical Physics and Biophysics (EE))

Co-authors: MARZO, Carlo (NICPB); GABRIELLI, Emidio (Nat. Inst. of Chem.Phys. & Biophys. (EE)); MARZOLA, Luca (National Institute of Chemical Physics and Biophysics (EE)); OUYANG, RUI-WEN (National Institute of Chemical Physics and Biophysics); RAIDAL, Martti (National Institute of Chemical Physics and Biophysics (EE))

Presenter: MÜÜRSEPP, Kristjan (National Institute of Chemical Physics and Biophysics (EE))

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: **30**

Type: **not specified**

Multi-scale multi-physics simulations of vacuum breakdown phenomena

Wednesday 30 June 2021 12:30 (15 minutes)

Author: KYRITSAKIS, Andreas (University of Tartu)

Presenter: KYRITSAKIS, Andreas (University of Tartu)

Session Classification: Advanced Technologies: Accelerators

Track Classification: Accelerators & Advanced Technologies: Other

Contribution ID: **31**

Type: **not specified**

Cancelled

Session Classification: High Energy Physics & Atomic Physics: Experiment

Contribution ID: 32

Type: **not specified**

Estimating the fake lepton backgrounds for the Drell-Yan differential cross section measurement using 2016 CERN CMS data

Tuesday 29 June 2021 10:25 (15 minutes)

Authors: JUODAGALVIS, Andrius (Vilnius University (LT)); AMBROZAS, Marijus (Vilnius University (LT))

Presenter: AMBROZAS, Marijus (Vilnius University (LT))

Session Classification: High Energy Physics & Atomic Physics: Experiment

Track Classification: High Energy Physics & Atomic Physics: Other

Contribution ID: 33

Type: **not specified**

An algebraic approach for the six nucleon systems

Tuesday 29 June 2021 11:45 (15 minutes)

Author: Dr STEPŠYS, Augustinas (Vytautas Magnus University)

Co-authors: Prof. MICKEVIČIUS, Saulius (Vytautas Magnus University); Dr GERMANAS, Darius (Center for Physical Sciences and Technology); Dr KALINAUSKAS, Ramutis Kazys (Vytautas Magnus University)

Presenter: Dr STEPŠYS, Augustinas (Vytautas Magnus University)

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: 34

Type: **not specified**

Aranet - wireless IoT ecosystem

Monday 28 June 2021 12:00 (10 minutes)

Author: Mr SPARNINS, Edgars (SAF Tehnika JSC)

Presenter: Mr SPARNINS, Edgars (SAF Tehnika JSC)

Session Classification: Industry Engagement and R&D

Track Classification: Industry engagement and R&D: General

Contribution ID: 35

Type: **not specified**

Real-time observation of strong electric-field-induced surface modification

Wednesday 30 June 2021 12:45 (15 minutes)

Authors: VLASSOV, Sergei (University of Tartu); KYRITSAKIS, Andreas; ORAS, Sven (University of Tartu); ZADIN, Vahur (University of Tartu (EE))

Presenter: VLASSOV, Sergei (University of Tartu)

Session Classification: Advanced Technologies: Accelerators

Track Classification: Accelerators & Advanced Technologies: CLIC

Contribution ID: 36

Type: **not specified**

Characterization of Cu electrodes after vacuum breakdown with AFM and SEM

Wednesday 30 June 2021 12:15 (15 minutes)

Author: ORAS, Sven (University of Tartu)

Presenter: ORAS, Sven (University of Tartu)

Session Classification: Advanced Technologies: Accelerators

Track Classification: Accelerators & Advanced Technologies: CLIC

Contribution ID: 37

Type: **not specified**

The study of structural, optical and luminescent properties of topical scintillator materials irradiated by swift heavy ions

Wednesday 30 June 2021 15:45 (15 minutes)

Authors: PANKRATOVA, Viktorija (Institute of Solid State Physics, University of Latvia); SKURATOV, Vladimir A. (Joint Institute for Nuclear Research); PANKRATOV, Vladimir (Institute of Solid State Physics, University of Latvia); POPOV, Anatoli I. (Institute of Solid State Physics, University of Latvia)

Presenter: PANKRATOVA, Viktorija (Institute of Solid State Physics, University of Latvia)

Session Classification: Advanced Technologies: Materials

Track Classification: Detectors: CCC

Contribution ID: **38**

Type: **not specified**

Study of scintillating materials by synchrotron radiation

Wednesday 30 June 2021 15:15 (15 minutes)

Author: PANKRATOV, Vladimir (Institute of Solid State Physics, University of Latvia)

Co-author: POPOV, Anatoli I. (Institute of Solid State Physics, University of Latvia)

Presenter: PANKRATOV, Vladimir (Institute of Solid State Physics, University of Latvia)

Session Classification: Advanced Technologies: Materials

Track Classification: Detectors: CCC

Contribution ID: 39

Type: **not specified**

Higher spin particles: dark matter and high energy colliders

Tuesday 29 June 2021 15:00 (15 minutes)

Author: KOIVUNEN, Niko (National Institute of Chemical Physics and Biophysics (EE))

Presenter: KOIVUNEN, Niko (National Institute of Chemical Physics and Biophysics (EE))

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: 40

Type: **not specified**

Compact Linear Collider and the problem of electric breakdowns

Wednesday 30 June 2021 11:45 (15 minutes)

Authors: KYRITSAKIS, Andreas; BUTANOV, Edgars (University of Tartu); ORAS, Sven (University of Tartu); VLASSOV, Sergei; ZADIN, Vahur (University of Tartu (EE))

Presenter: ZADIN, Vahur (University of Tartu (EE))

Session Classification: Advanced Technologies: Accelerators

Track Classification: Accelerators & Advanced Technologies: CLIC

Contribution ID: 41

Type: **not specified**

Timing detector layer at the CMS experiment for LHC Run 4

Wednesday 30 June 2021 16:25 (15 minutes)

Author: DREIMANIS, Karlis (Riga Technical University (LV))

Co-authors: STANA, Girts (Riga Technical University (LV)); VECKALNS, Viesturs (Riga Technical University (LV)); PIKURS, Guntis (Riga Technical University (LV))

Presenter: DREIMANIS, Karlis (Riga Technical University (LV))

Session Classification: Advanced Technologies: Detectors

Track Classification: Detectors: CMS

Contribution ID: 42

Type: **not specified**

Top quark physics engagement at RTU

Tuesday 29 June 2021 11:00 (15 minutes)

Authors: POTREBKO, Andris (Riga Technical University (LV)); VECKALNS, Viesturs (Riga Technical University (LV))

Co-author: DREIMANIS, Karlis (Riga Technical University (LV))

Presenters: POTREBKO, Andris (Riga Technical University (LV)); VECKALNS, Viesturs (Riga Technical University (LV))

Session Classification: High Energy Physics & Atomic Physics: Experiment

Track Classification: High Energy Physics & Atomic Physics: Top Q Physics

Contribution ID: 43

Type: **not specified**

Improving low-pt electron reconstruction for Higgs physics at CMS

Tuesday 29 June 2021 10:10 (15 minutes)

Authors: GAILE, Antra (Riga Technical University (LV)); PROSKURINS, Eugene (Riga Technical University (LV)); STRAUTNIEKS, Normunds Ralfs (University of Latvia (LV))

Co-authors: DREIMANIS, Karlis (Riga Technical University (LV)); PAJUSTE, Elina (University of Latvia (LV))

Presenters: GAILE, Antra (Riga Technical University (LV)); PROSKURINS, Eugene (Riga Technical University (LV)); STRAUTNIEKS, Normunds Ralfs (University of Latvia (LV))

Session Classification: High Energy Physics & Atomic Physics: Experiment

Track Classification: High Energy Physics & Atomic Physics: Higgs physics

Contribution ID: 44

Type: **not specified**

Development of a Doctoral Study programme in Particle Physics and Accelerator Technologies

Monday 28 June 2021 16:00 (15 minutes)

Author: Dr DREIMANIS, Karlis (Riga Technical University (LV))

Co-authors: VITOLA, Silva (RTU); TORIMS, Toms (Riga Technical University (LV)); Prof. AUZINS, Marcis (University of Latvia)

Presenters: Dr DREIMANIS, Karlis (Riga Technical University (LV)); VITOLA, Silva (RTU); Prof. AUZINS, Marcis (University of Latvia)

Session Classification: National Activities and Education

Contribution ID: 45

Type: **not specified**

State research programme in High-Energy Physics and Accelerator Technologies in Latvia

Monday 28 June 2021 15:30 (15 minutes)

Author: Dr DREIMANIS, Karlis (Riga Technical University (LV))

Co-authors: PAJUSTE, Elina (University of Latvia (LV)); POPOV, Anatoli I. (Institute of Solid State Physics, University of Latvia); RATKUS, Andris (Riga Technical University (LV)); RUSE, Aija (Riga Technical University)

Presenter: Dr DREIMANIS, Karlis (Riga Technical University (LV))

Session Classification: National Activities and Education

Contribution ID: 46

Type: **not specified**

Examples of AI applications

Wednesday 30 June 2021 15:30 (15 minutes)

Author: Prof. RAUDONIS, Vidas (Kaunas University of Technology)

Presenter: Prof. RAUDONIS, Vidas (Kaunas University of Technology)

Session Classification: Advanced Technologies: Materials

Track Classification: Data analysis: Machine Learning

Contribution ID: 47

Type: **not specified**

Composite materials from nature for space applications

Wednesday 30 June 2021 14:30 (15 minutes)

Authors: Prof. PALEVIČIUS, Arvydas (Kaunas University of Technology); Dr ZELENIAKIENĖ, Daiva (Kaunas University of Technology); Prof. JANUŠAS, Giedrius (Kaunas University of Technology); Dr DUNDULIS, Gintautas (Kaunas University of Technology); Dr YOUSEF, Samy (Kaunas University of Technology)

Presenter: Prof. JANUŠAS, Giedrius (Kaunas University of Technology)

Session Classification: Advanced Technologies: Materials

Track Classification: Accelerators & Advanced Technologies: Other

Contribution ID: 48

Type: **not specified**

Medical radiation dosimetry: some recent developments at Kaunas University of Technology

Wednesday 30 June 2021 09:45 (15 minutes)

Author: Prof. ADLIENĖ, Diana (Kaunas University of Technology)

Presenter: Prof. ADLIENĖ, Diana (Kaunas University of Technology)

Session Classification: Accelerator Technologies & Societal Applications

Track Classification: Accelerators & Advanced Technologies: Societal applications

Contribution ID: 49

Type: **not specified**

CERN activities at the Institute of Materials Science of Kaunas University of Technology

Monday 28 June 2021 16:35 (10 minutes)

Authors: Dr ABAKEVIČIENĖ, Brigita (Kaunas University of Technology); Prof. TAMULEVIČIUS, Sigitas (Kaunas University of Technology); Prof. TAMULEVIČIUS, Tomas (Kaunas University of Technology); Dr MEŠKINIS, Šarūnas (Kaunas University of Technology)

Presenter: Prof. TAMULEVIČIUS, Sigitas (Kaunas University of Technology)

Session Classification: National Activities and Education

Contribution ID: 50

Type: **not specified**

Assembly and technical check-up

Monday 28 June 2021 09:45 (15 minutes)

Session Classification: Welcome and Opening

Contribution ID: 51

Type: **not specified**

NIMMS: the Next Ion Medical Machine Study

Wednesday 30 June 2021 10:30 (15 minutes)

Authors: BENEDETTO, Elena (SEEIIST Association (CH)); VRETENAR, Maurizio (CERN)

Presenter: BENEDETTO, Elena (SEEIIST Association (CH))

Session Classification: Accelerator Technologies & Societal Applications

Track Classification: Accelerators & Advanced Technologies: Societal applications

Contribution ID: 52

Type: **not specified**

Comparative analysis of two LYSO crystal bars by photoluminescence and Raman spectroscopy

Wednesday 30 June 2021 14:45 (15 minutes)

Authors: PANKRATOVA, Viktorija (Institute of Solid State Physics, University of Latvia); IVANOVA, Anna (Institute of Solid State Physics, University of Latvia); PANKRATOV, Vladimir (Institute of Solid State Physics, University of Latvia); POPOV, Anatoli I. (Institute of Solid State Physics, University of Latvia)

Presenter: POPOV, Anatoli I. (Institute of Solid State Physics, University of Latvia)

Session Classification: Advanced Technologies: Materials

Track Classification: Detectors: CCC

Contribution ID: 53

Type: **not specified**

On the On-Shell Renormalization of Fermion Masses, Fields, and Mixing Matrices at 1-loop

Tuesday 29 June 2021 15:30 (15 minutes)

Author: Mr DRAUKŠAS, Simonas (Vilnius University (LT))

Presenter: Mr DRAUKŠAS, Simonas (Vilnius University (LT))

Session Classification: High Energy Physics & Atomic Physics: Theory

Track Classification: High Energy Physics & Atomic Physics: Theory

Contribution ID: 54

Type: **not specified**

Ab initio investigation of Cu nanoparticle behavior under high electric field

Wednesday 30 June 2021 13:00 (15 minutes)

Author: WANG, Ye (University of Tartu)

Co-authors: Prof. KYRITSAKIS, Andreas; Dr VLASSOV, Sergei; Prof. ZADIN, Vahur

Presenter: WANG, Ye (University of Tartu)

Session Classification: Advanced Technologies: Accelerators

Track Classification: Accelerators & Advanced Technologies: Advanced technological solutions

Contribution ID: 55

Type: **not specified**

Opening and welcome by the Rector of the University of Tartu

Monday 28 June 2021 10:00 (10 minutes)

Presenter: Prof. ASSER, Toomas (UT)

Session Classification: Welcome and Opening

Track Classification: Welcome and Opening: Opening session

Contribution ID: 56

Type: **not specified**

Estonia and CERN: Minister of Education and Research of the Republic of Estonia

Monday 28 June 2021 10:10 (10 minutes)

Presenter: Ms KERSNA, Liina

Session Classification: Policy and Strategy

Track Classification: Welcome and Opening: Policy

Contribution ID: 57

Type: **not specified**

Latvia and CERN: Minister of Education and Science of the Republic of Latvia

Monday 28 June 2021 10:30 (10 minutes)

Presenter: Ms MUIŽNIECE, Anita

Session Classification: Policy and Strategy

Track Classification: Welcome and Opening: Policy

Contribution ID: 58

Type: **not specified**

Lithuania and CERN: Minister of Education, Science and Sport of the Republic of Lithuania

Monday 28 June 2021 10:20 (10 minutes)

Presenter: Ms ŠIUGŽDINIENĖ, Jurgita

Session Classification: Policy and Strategy

Track Classification: Welcome and Opening: Policy

Contribution ID: 59

Type: **not specified**

Importance of the cooperation with the CERN - development of science, research and technology in the Baltic States: President of the Baltic Assembly

Monday 28 June 2021 10:40 (10 minutes)

Presenter: Mr KUPČINSKAS, Andrius

Session Classification: Policy and Strategy

Track Classification: Welcome and Opening: Policy

Contribution ID: **60**

Type: **not specified**

CERN and Baltic States: CERN Director for International Relations

Monday 28 June 2021 10:50 (10 minutes)

Presenter: Ms WARAKAULLE, Charlotte Lindberg (CERN)

Session Classification: Policy and Strategy

Track Classification: Welcome and Opening: Policy

Contribution ID: **61**

Type: **not specified**

Evolution of the CERN Baltic Group

Monday 28 June 2021 11:00 (10 minutes)

Presenter: Prof. TORIMS, Toms (Riga Technical University (LV))

Session Classification: Policy and Strategy

Track Classification: Welcome and Opening: CBG activities

Contribution ID: 77

Type: **not specified**

Electron Acceleration using Chirped Radially Polarized Superluminal Bessel-X Beams

Wednesday 30 June 2021 11:15 (15 minutes)

Authors: LAURINAVIČIUS, Klemensas (FTMC); ORLOV, Sergej (FTMC); GOTOVSKI, Pavel (FTMC)

Presenter: ORLOV, Sergej (FTMC)

Session Classification: Advanced Technologies: Accelerators

Track Classification: Accelerators & Advanced Technologies: Advanced technological solutions

Contribution ID: 79

Type: **not specified**

Doing business with CERN

Monday 28 June 2021 14:00 (20 minutes)

Presenter: UNNERVIK, Anders (CERN)

Session Classification: Industry Engagement and R&D

Contribution ID: **80**

Type: **not specified**

Testonica

Monday 28 June 2021 11:20 (10 minutes)

Presenter: ARTUR, Jutman (Testonica)

Session Classification: Industry Engagement and R&D

Contribution ID: **81**

Type: **not specified**

Laser for wakefield acceleration

Monday 28 June 2021 11:30 (10 minutes)

Presenter: VARPUČIANSKIS, Justas (Ekspla)

Session Classification: Industry Engagement and R&D

Contribution ID: **82**

Type: **not specified**

Advanced 3D Microfabrication Workstation for High-Tech Applications

Monday 28 June 2021 11:40 (10 minutes)

Presenter: Dr JONUŠAUSKAS, Linas (Femtika)

Session Classification: Industry Engagement and R&D

Contribution ID: **83**

Type: **not specified**

CMS Tier2 development in Latvia

Monday 28 June 2021 14:30 (10 minutes)

Presenter: DATI GROUP

Session Classification: Industry Engagement and R&D

Contribution ID: **84**

Type: **not specified**

ILO experience - industry engagement in Lithuania

Monday 28 June 2021 14:50 (10 minutes)

Presenter: JELINSKAS, Adomas (Lithuanian Innovation Center)

Session Classification: Industry Engagement and R&D

Contribution ID: **85**

Type: **not specified**

To be announced ...

Session Classification: Industry Engagement and R&D

Contribution ID: **86**

Type: **not specified**

To be announced ...

Session Classification: Industry Engagement and R&D

Contribution ID: 87

Type: **not specified**

The Baltic Teacher Programme @ CERN

Monday 28 June 2021 15:45 (15 minutes)

Presenter: WIENER, Jeff (CERN)

Session Classification: National Activities and Education

Contribution ID: **88**

Type: **not specified**

CERN related physics teaching at Tartu Univeristy

Monday 28 June 2021 16:25 (10 minutes)

Presenter: JÄRV, Laur (University of Tartu)

Session Classification: National Activities and Education

Contribution ID: **89**

Type: **not specified**

Baltic School of High-Energy Physics and Accelerator Technologies

Monday 28 June 2021 16:45 (10 minutes)

Presenter: Dr DREIMANIS, Karlis (Riga Technical University (LV))

Session Classification: National Activities and Education

Contribution ID: **90**

Type: **not specified**

Assembly and technical check-up - Day 2

Tuesday 29 June 2021 08:45 (15 minutes)

Contribution ID: **91**

Type: **not specified**

Q&A for Keynote Speech

Tuesday 29 June 2021 09:45 (10 minutes)

Contribution ID: 92

Type: **not specified**

TBC - TalTech contribution

Session Classification: Accelerator Technologies & Societal Applications

Contribution ID: 93

Type: **not specified**

TBC - Ye Wang contribution

Session Classification: Advanced Technologies: Accelerators

Contribution ID: **94**

Type: **not specified**

Assembly and technical check-up - Day 3

Wednesday 30 June 2021 08:45 (15 minutes)

Contribution ID: **96**

Type: **not specified**

Closing Remarks

Wednesday 30 June 2021 17:10 (5 minutes)

Contribution ID: 97

Type: **not specified**

HEP-EX @ NICPB, Tallinn

Tuesday 29 June 2021 11:15 (15 minutes)

Presenter: KADASTIK, Mario (National Institute of Chemical Physics and Biophysics (EE))

Session Classification: High Energy Physics & Atomic Physics: Experiment

Contribution ID: 98

Type: **not specified**

Rebirth of Medical Cyclotron facility in Latvia- Kodolmedicīnas centrs

Monday 28 June 2021 11:50 (10 minutes)

Co-author: Mr KUZMINSKIS, Māris

Presenters: Mr KUZMINSKIS, Māris; SIA "KODOLMEDICĪNAS CENTRS"; KUSIŅŠ, Toms

Session Classification: Industry Engagement and R&D