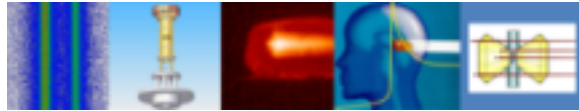


APPA R&D Collaboration Meeting



Report of Contributions

Contribution ID: 0

Type: **poster**

Transverse free-electron target for CRYRING@ESR

Primary author: DÖHRING, Michel (Justus-Liebig-Universität, FB07, AG für Atom- und Molekülphysik)

Co-authors: BOROVIK, Alexander (Justus-Liebig Universität Gießen); MÜLLER, Alfred (JLU Giessen); EBINGER, Benjamin (Justus-Liebig-Universität Gießen); BRANDAU, Carsten (GSI, Darmstadt); KOZHUHAROV, Christophor (GSI, Darmstadt); SCHIPPERS, Stefan (JLU Giessen); MOLKENTIN, Tobias (Justus-Liebig-Universität Gießen, I. Physikalisches Institut)

Presenter: DÖHRING, Michel (Justus-Liebig-Universität, FB07, AG für Atom- und Molekülphysik)

Track Classification: Poster

Contribution ID: 1

Type: **poster**

I-BEAT: A new ultrasonic method for single bunch measurement of ion energy distribution

Primary author: SCHREIBER, Jörg (Ludwig-Maximilians-Universität München)

Presenter: SCHREIBER, Jörg (Ludwig-Maximilians-Universität München)

Track Classification: Poster

Contribution ID: 2

Type: **poster**

A Recoil Spectrometer for the electrostatic Frankfurt Low energy Storage Ring

Primary author: Mr MÜLLER, Jan (Goethe University, Institute for Nuclear Physics)

Co-authors: Dr STIEBING, Kurt Ernst (Universität Frankfurt und FAIR GmbH, Darmstadt); Dr SCHMIDT, Lothar (Goethe University, Institute for Nuclear Physics); Dr SCHÖFFLER, Markus (Goethe University, Institute for Nuclear Physics); Prof. DÖRNER, Reinhard (Goethe University, Institute for Nuclear Physics)

Presenter: Mr MÜLLER, Jan (Goethe University, Institute for Nuclear Physics)

Track Classification: Poster

Contribution ID: 3

Type: **poster**

SiM-X: Silicon Microcalorimeters for X-Ray Spectroscopy - Status and Perspectives

Primary author: KRAFT-BERMUTH, Saskia (GSI, Darmstadt)

Co-authors: ECHLER, Artur (GSI, Darmstadt); MUELL, Damian (I.Physics Institute, Justus-Liebig-University); Mr SCHOLZ, Pascal (Universitaet Giessen); EGELHOF, Peter (GSI, Darmstadt); ANDRI-ANOV, Victor (Lomonosov State University)

Presenter: KRAFT-BERMUTH, Saskia (GSI, Darmstadt)

Track Classification: Poster

Contribution ID: 4

Type: **not specified**

News from FAIR

Presenter: Prof. GIUBELLINO, Paolo (GSI)

Contribution ID: 5

Type: **not specified**

News from FAIR

Thursday, 11 January 2018 14:10 (20 minutes)

Presenter: GIUBELLINO, Paolo (GSI)

Session Classification: Session 1

Contribution ID: 6

Type: **not specified**

Welcome

Thursday, 11 January 2018 14:00 (10 minutes)

Presenter: STÖHLKER, Thomas (GSI, Darmstadt)

Session Classification: Session 1

Contribution ID: 7

Type: **not specified**

Recent Developments from BMBF

Thursday, 11 January 2018 14:30 (20 minutes)

Presenter: EHRENFELD, Wolfgang (PT-DESY)

Session Classification: Session 1

Contribution ID: 8

Type: **not specified**

Status of the HED@FAIR Collaboration

Thursday, 11 January 2018 14:50 (20 minutes)

Presenter: NEFF, Stephan (FAIR, Darmstadt)

Session Classification: Session 1

Contribution ID: 9

Type: **not specified**

Status of the SPARC Collaboration

Thursday, 11 January 2018 15:10 (20 minutes)

Presenter: SCHUCH, Reinhold (Stockholm university)

Session Classification: Session 1

Contribution ID: **10**

Type: **not specified**

News from BIOMAT

Thursday, 11 January 2018 15:30 (20 minutes)

Presenter: Dr TRAUTMANN, Christina (GSI, Darmstadt)

Session Classification: Session 1

Contribution ID: 11

Type: **not specified**

Status of FAIR Phase 0

Thursday, 11 January 2018 15:50 (20 minutes)

Presenter: BAI, Mei (GSI, Darmstadt)

Session Classification: Session 1

Contribution ID: 12

Type: **not specified**

Status of the Experimental Installations at CRYRING

Thursday, 11 January 2018 16:10 (20 minutes)

Presenter: LESTINSKY, Michael (GSI, Darmstadt)

Session Classification: Session 1

Contribution ID: 13

Type: **not specified**

Current Status of the XUV Laser Source for FAIR and XUV Photoionization at CRYRING (G-PAC E129)

Thursday, 11 January 2018 17:00 (20 minutes)

Presenter: HILBERT, Vinzenz (IOQ Friedrich Schiller Universität Jena)

Session Classification: Session 2

Contribution ID: 14

Type: **not specified**

Electron-Ion Collision Spectroscopy at the CRYRING Cooler (G-PAC E131)

Thursday, 11 January 2018 17:20 (20 minutes)

Presenter: BRANDAU, Carsten (GSI, Darmstadt)

Session Classification: Session 2

Contribution ID: 15

Type: **not specified**

GeV Secondary Ion and Neutral Mass Spectrometry

Thursday, 11 January 2018 17:40 (20 minutes)

Presenter: BREUER, Lars (Uni Duisburg-Essen)

Session Classification: Session 2

Contribution ID: 16

Type: **not specified**

Laser Spectroscopy of Be-like Krypton (Fine Structure) at the ESR (G-PAC E135)

Thursday, 11 January 2018 18:00 (20 minutes)

Presenter: KLAMMES, Sebastian (GSI)

Session Classification: Session 2

Contribution ID: 17

Type: **not specified**

Ways Towards a Solution of the Hyperfine Puzzle of Strong-Field Bound-State QED (G-PAC E128+E130)

Thursday, 11 January 2018 18:20 (20 minutes)

Presenter: NÖRTERSCHÄUSER, Wilfried (TU Darmstadt)

Session Classification: Session 2

Contribution ID: **18**

Type: **not specified**

Laser Cooling of Ions in SIS100 and HESR

Thursday, 11 January 2018 18:40 (20 minutes)

Presenters: BUSSMANN, Michael (Helmholtz-Zentrum Dresden - Rossendorf); WALTHER, Thomas (TU Darmstadt)

Session Classification: Session 2

Contribution ID: 19

Type: **not specified**

Sympathetic Cooling of Ions

Friday, 12 January 2018 09:00 (20 minutes)

Presenter: SCHMIDT-KALER, Ferdinand (Institut fuer Physik)

Session Classification: Session 3

Contribution ID: 20

Type: **not specified**

Measurements of Proton-Induced Reaction Rates on Radioactive Isotopes for the Astrophysical p Process (G-PAC E127)

Friday, 12 January 2018 09:20 (20 minutes)

Presenter: REIFARTH, René (University of Frankfurt)

Session Classification: Session 3

Contribution ID: 21

Type: **not specified**

Precise Determination of the 1s Lamb Shift in Hydrogenlike Uranium (G-PAC E138)

Friday, 12 January 2018 09:40 (20 minutes)

Presenter: WEBER, Günter (HI-Jena & GSI, Darmstadt)

Session Classification: Session 3

Contribution ID: 22

Type: **not specified**

Status of the ESR Gas Target

Friday, 12 January 2018 10:00 (20 minutes)

Presenter: PETRIDIS, Nikolaos (GSI, Darmstadt)

Session Classification: Session 3

Contribution ID: 23

Type: **not specified**

Dynamic response of high power target and beam dumps materials to beam induced pressure waves

Friday, 12 January 2018 10:20 (20 minutes)

Presenter: SIMON, Pascal (GSI, Darmstadt)

Session Classification: Session 3

Contribution ID: 24

Type: **not specified**

Resolving Material Properties and Chemical Reactions in Warm Dense Matter

Friday, 12 January 2018 11:10 (20 minutes)

Presenter: KRAUS, Dominik (HZDR)

Session Classification: Session 4

Contribution ID: 25

Type: **not specified**

FAIR Relevant Research and Development at TU Darmstadt

Friday, 12 January 2018 11:30 (20 minutes)

Presenter: ROTH, Markus (TU Darmstadt)

Session Classification: Session 4

Contribution ID: 26

Type: **not specified**

Study on a Dense and Highly Ionized Plasma for its Application as a Plasma Stripper for FAIR

Friday, 12 January 2018 11:50 (20 minutes)

Presenter: CISTAKOV, Konstantin (U Frankfurt)

Session Classification: Session 4

Contribution ID: 27

Type: **not specified**

Development and Characterization of X-Ray Spectrometers for Plasma Physics Experiments

Friday, 12 January 2018 12:10 (20 minutes)

Presenter: KHAGHANI, Dimitri

Session Classification: Session 4

Contribution ID: 28

Type: **not specified**

Ion-Track Based Nanostructured Electrodes for Water Splitting

Friday, 12 January 2018 14:30 (20 minutes)

Presenter: YANG, Florent (GSI)

Session Classification: Session 5

Contribution ID: 29

Type: **not specified**

Ion-Beam Induced Desorption Processes

Friday, 12 January 2018 14:50 (20 minutes)

Presenter: BENDER, Markus (GSI, Darmstadt)

Session Classification: Session 5

Contribution ID: **30**

Type: **not specified**

Precision Spectroscopy Using RCE in Crystals (G-PAC E137)

Friday, 12 January 2018 15:10 (20 minutes)

Presenter: BRÄUNING-DEMIAN, Angela (GSI, Darmstadt)

Session Classification: Session 5

Contribution ID: 31

Type: **not specified**

Delta N=0 Transitions in He-Like Uranium (G-PAC E125)

Friday, 12 January 2018 15:30 (20 minutes)

Presenter: GUMBERIDZE, Alexandre (GSI, Darmstadt)

Session Classification: Session 5

Contribution ID: 32

Type: **not specified**

APPA R&D Business

Friday, 12 January 2018 15:50 (20 minutes)

Presenter: SCHIPPERS, Stefan (JLU Giessen)

Session Classification: Session 5

Contribution ID: 33

Type: **poster**

Single-ion-induced surface modifications on H/Si(001) – comparison of slow highly charged and swift heavy ions

Primary author: LÄNGER, Christian (JLU Giessen)

Co-authors: Dr TRAUTMANN, Christina (GSI, Darmstadt); Dr SEVERIN, Daniel (GSI, Darmstadt); Prof. SCHLEBERGER, Marika (Universität Duisburg-Essen); BENDER, Markus (GSI, Darmstadt); DÜRR, Michael (Justus-Liebig-Universität Gießen(JULGi)); ERNST, Philipp (University Duisburg-Essen)

Presenter: DÜRR, Michael (Justus-Liebig-Universität Gießen(JULGi))

Track Classification: Poster

Contribution ID: 34

Type: **not specified**

Ion-Beam Diagnostics - Status Report for the Year 2017

Friday, 12 January 2018 12:30 (20 minutes)

Presenter: ULRICH, Andreas (TU-München, Physik-Department E12)

Session Classification: Session 4

Contribution ID: 35

Type: **poster**

Fluorescence detector concept for laser cooling at SIS100

Primary author: ULLMANN, Johannes (Institut für Kernphysik, Uni Münster)

Co-authors: WEINHEIMER, Christian (Institut für Kernphysik, University of Münster); WINTERS, Danyal (GSI, Darmstadt); HANNEN, Volker (Institut für Kernphysik, Uni Münster)

Presenter: ULLMANN, Johannes (Institut für Kernphysik, Uni Münster)

Track Classification: Poster

Contribution ID: 36

Type: **poster**

A Detection System for Laser Spectroscopy Experiments at CRYRING

Primary author: BUß, Axel (Westfälische-Wilhelms-Universität)

Co-authors: HANNEN, Volker (Institut für Kernphysik, Uni Münster); ANDELKOVIC, Zoran (GSI, Darmstadt)

Presenter: BUß, Axel (Westfälische-Wilhelms-Universität)

Track Classification: Poster

Contribution ID: 37

Type: **poster**

Fourier Limited Picosecond Pulses for Laser Cooling of Relativistic Ion Beams

Primary author: Mr KIEFER, Daniel (PhD Student)

Co-author: Prof. WALTHER, Thomas (TU Darmstadt)

Presenter: Mr KIEFER, Daniel (PhD Student)

Track Classification: Poster

Contribution ID: 38

Type: **poster**

Swift Heavy Ion Beam Induced Degradation of Scintillation Performance of Aluminum Oxide

Primary author: Mr STOHR, Tobias (TU Darmstadt, Darmstadt, Germany)

Co-authors: Dr FORCK, Peter (GSI, Darmstadt); Mr LEDERER, Stephan (Technische Universität Darmstadt); Prof. ENSINGER, Wolfgang (TU Darmstadt)

Presenter: Mr STOHR, Tobias (TU Darmstadt, Darmstadt, Germany)

Track Classification: Poster

Contribution ID: 39

Type: **poster**

Sympathetic cooling of OH- by a laser-cooled buffer gas

Primary author: Mr TAUCH, Jonas (Physikalisches Institut Heidelberg)

Co-authors: Dr HÖLTKEMEIER, Bastian (Physikalisches Institut Heidelberg); Mr ENDRES, Eric (Physikalisches Institut Heidelberg); Mr LOPEZ, Henry (Physikalisches Institut Heidelberg); Mr TRAUTMANN, Jan (Physikalisches Institut Heidelberg); Prof. WEIDEMÜLLER, Matthias (Universität Heidelberg); Prof. WESTER, Roland (University of Innsbruck)

Presenter: Mr TAUCH, Jonas (Physikalisches Institut Heidelberg)

Track Classification: Poster

Contribution ID: 40

Type: **poster**

Towards a study of the $^{44}\text{Ti}(\alpha,p)^{47}\text{V}$ reaction at CRYRING

Primary author: Dr FORSTNER, Oliver (Universität Jena, HI-Jena)

Co-authors: Dr BEMMERER, Daniel (Helmholtz-Zentrum Dresden-Rossendorf (HZDR)); Prof. ZUBER, Kai (TU Dresden); Dr LESTINSKY, Michael (GSI, Darmstadt); Dr MERCHEL, Silke (Helmholtz-Zentrum Dresden-Rossendorf (HZDR)); STÖHLKER, Thomas (GSI, Darmstadt)

Presenter: Dr FORSTNER, Oliver (Universität Jena, HI-Jena)

Track Classification: Poster

Contribution ID: 41

Type: **poster**

Frequency compensation and status update of the precision high voltage divider for the electron cooler at CRYRING@ESR

Primary author: Mr WINZEN, Daniel (Institut für Kernphysik, WWU Münster)

Co-authors: Prof. WEINHEIMER, Christian (Institut für Kernphysik, University of Münster); Mr ORTJOHANN, Hans-Werner (Westfälische Wilhelms-Universität Münster); Mr DENESJUK, Ilian (Westfälische Wilhelms-Universität Münster); Mr REST, Oliver (Westfälische Wilhelms-Universität Münster); Mr DIRKES, Timo (Westfälische Wilhelms-Universität Münster); Dr HANNEN, Volker (Institut für Kernphysik, Uni Münster); Prof. NOERTERSHAEUSER, Wilfried (TU Darmstadt)

Presenter: Mr WINZEN, Daniel (Institut für Kernphysik, WWU Münster)

Track Classification: Poster

Contribution ID: 42

Type: **poster**

Radiation-hydrodynamic simulations of backlighter options for FAIR

Primary author: Dr FAIK, Steffen (Institute for Applied Physics, Goethe University Frankfurt am Main)

Co-author: Dr TAUSCHWITZ, Anna (Goethe-Universität Frankfurt am Main)

Presenter: Dr TAUSCHWITZ, Anna (Goethe-Universität Frankfurt am Main)

Track Classification: Poster

Contribution ID: 43

Type: **poster**

Optimisation of Secondary Laser Sources for WDM-Investigations at FAIR

Primary author: ZÄHTER, Sero (Goethe-Universität Frankfurt(UFfm-IAP))

Co-authors: BORM, Björn (Goethe-Universität Frankfurt(UFfm)); Dr KHAGHANI, Dimitri; HORST, Felix (GSI, Darmstadt); JACOBY, Joachim; SCHMAL, Kristina (Institute for Applied Physics (IAP), Goethe University, Fankfurt, Germany); Dr PUGACHEV, Leonid (Joint Institute for Temperatures of the Russian Academy of Sciences); ZAHN, Nadiya; Dr BORISENKO, Natal'ya (Lebedev Physical Institute (LPI), Russian Academy of Sciences (RAS), Moscow, Russia); Prof. ANDREEV, Nikolay (JIHT RAS); ROSMEJ, Olga (GSI, Darmstadt); CHRIST, Philipp (Institute for Applied Physics (IAP), Goethe University, Fankfurt, Germany)

Presenter: ZÄHTER, Sero (Goethe-Universität Frankfurt(UFfm-IAP))

Track Classification: Poster

Contribution ID: 44

Type: **poster**

Galactic cosmic rays in the lab@APPA

Primary author: SCHUY, Christoph (GSI, Darmstadt)

Co-authors: GRAEFF, Christian (GSI, Darmstadt); Dr PLESKAC, Radek (GSI, Darmstadt); WEBER, Ulrich (GSI, Darmstadt)

Track Classification: Poster

Contribution ID: 45

Type: **poster**

Carbon Ion Therapy for Moving Tumors

Primary author: LIS, Michelle (GSI, Darmstadt)

Co-author: GRAEFF, Christian (GSI, Darmstadt)

Track Classification: Poster