

# **2nd PhD Science Day @ GSI 2014**

## **Report of Contributions**

Contribution ID: 0

Type: **not specified**

## **Spirit of PhD Science Day @ GSI**

*Monday, 11 August 2014 14:00 (5 minutes)*

**Presenter:** GHOSH, Pradeep (Goethe-Universität Frankfurt(UFfm-IKP))

**Session Classification:** Welcome

Contribution ID: 1

Type: **not specified**

## **Contributions of GSI in Science**

*Monday, 11 August 2014 14:05 (20 minutes)*

**Presenter:** Prof. LANGANKE, Karlheinz (Scientific Research Director, GSI Helmholtz Center GmbH)

**Session Classification:** Welcome

Contribution ID: 2

Type: **not specified**

## Few words of Motivation

*Monday, 11 August 2014 14:25 (5 minutes)*

**Presenter:** Dr BURAU, Gerhard (Scientific Coordinator, HGS-HIRe)

**Session Classification:** Welcome

Contribution ID: 3

Type: **not specified**

## Sharing Experience-1

*Monday, 11 August 2014 15:00 (5 minutes)*

**Presenter:** Dr GALATYUK, Tetyana (TU Darmstadt / GSI)

**Session Classification:** Information Exchange

Contribution ID: 4

Type: **not specified**

## Sharing Experience-2

*Monday, 11 August 2014 15:05 (5 minutes)*

**Presenter:** Dr BOURAS, Ioannis (Goethe University, Frankfurt am Main)

**Session Classification:** Information Exchange

Contribution ID: 5

Type: **not specified**

## Sharing Experience-3

*Monday, 11 August 2014 15:10 (5 minutes)*

**Presenter:** Dr AMAR, Samir (Goethe-Universität Frankfurt(UFfm-IKP))

**Session Classification:** Information Exchange

Contribution ID: 6

Type: **not specified**

## Sharing Experience-4

**Presenter:** Dr BOURAS, Ioannis (Goethe University, Frankfurt am Main)



Contribution ID: 7

Type: **not specified**

## Sharing Experience-5

**Presenter:** TBA

Contribution ID: 8

Type: **not specified**

## **Contribution & Achievements of GSI in Science**

**Presenter:** Dr STURM, Christian (GSI, Darmstadt)

Contribution ID: 9

Type: **not specified**

## Future FAIR facility

**Presenter:** Dr LEHMANN, Inti (FAIR GmbH, Darmstadt)

Contribution ID: **10**

Type: **not specified**

## **ALICE-01-Low-mass dielectron production in proton-proton collisions at $\sqrt{s} = 7$ TeV with ALICE**

**Presenter:** KOEHLER, Markus (ALICE-GSI Darmstadt)

Contribution ID: 11

Type: **not specified**

## **ALICE-02-Electrons from HF hadron decays in p-Pb collisions at $\sqrt{s(NN)} = 5.02$ TeV with ALICE at the LHC**

**Presenter:** WAGNER, Jan (ALICE-GSI Darmstadt)

Contribution ID: 12

Type: **not specified**

## **AcceleratorPhysik-01-Iron-free high current pulsed air-core coil quadrupoles**

**Presenter:** Ms TENHOLT, Carmen (FAIR@GSI, GSI Darmstadt and Goethe University, Frankfurt am Main)

Contribution ID: 13

Type: **not specified**

## **AcceleratorPhysik-02- Poster on magnets for SIS 100/300**

**Presenter:** Mr SZWANGRUBER, Piotr (FAIR@GSI and TU Darmstadt)

Contribution ID: 14

Type: **not specified**

## **CBM-STS-01-The Silicon Tracking System of the CBM experiment at FAIR – overview and development progress –**

**Presenter:** Mr SOROKIN, Iurii (CBM-GSI Darmstadt and Goethe University Frankfurt am Main)



Contribution ID: 15

Type: **not specified**

## **CBM-STS-02-Systematic Characterization & Quality Assurance of Silicon Microstrip Sensors for the Silicon Tracking System at the CBM Experiment @ FAIR**

**Presenter:** Mr GHOSH, Pradeep (CBM-GSI Darmstadt and Goethe University Frankfurt am Main)

Contribution ID: 16

Type: **not specified**

## **CBM-MVD-01-Radiation Tolerance of CMOS Sensors**

**Presenter:** Mr DOERING, Dennis (CBM-GSI, Darmstadt and Goethe University, Frankfurt am Main)

Contribution ID: 17

Type: **not specified**

## **CBM-MVD-02-**

**Presenter:** Mr BORISLAV, Milanovic (CBM-GSI Darmstadt and Goethe University, Frankfurt am Main)

Contribution ID: **18**

Type: **not specified**

## **CBM-MVD-03-Mechanical Integration of the Prototype of the CBM Micro Vertex Detector**

**Presenter:** Mr TISCHLER, Tobias (CBM-GSI Darmstadt and Goethe University, Frankfurt am Main)

Contribution ID: 19

Type: **not specified**

## **AtomPhysik-01-Development of a Transversely Sensitive Resonator as a Schottky Noise Detector for CR at FAIR**

**Presenter:** Mr XIANGCHEN, Chen (EMMI-GSI Darmstadt and Ruprecht-Karls-University, Heidelberg)

Contribution ID: 20

Type: **not specified**

## **AtomPhysik-02-Laser Spectroscopy of Transfermium Elements in a Buffer-gas Cell**

**Presenter:** LAUTENSCHLAEGER, Felix (AtomPhysik-GSI Darmstadt and TU Darmstadt)

Contribution ID: 21

Type: **not specified**

## **AtomPhysik-03-Direct mass measurements of $^{58}\text{Ni}$ projectile fragments at CSRe**

**Presenter:** YAN, Xinliang (AtomPhysik-GSI Darmstadt, Max-Planck-Institute for Nuclear Physics, Germany and Chinese Academy of Sciences, China)

Contribution ID: 22

Type: **not specified**

## **NUSTAR-01-Analysis of the $^{104}\text{Sn}$ experiment at PreSPEC**

**Presenter:** GUASTALLA, Guilia (GammaSpectroscopy-GSI Darmstadt and TU Darmstadt)



Contribution ID: 23

Type: **not specified**

## **HADES01- Reconstruction of neutral Mesons in 1.23 GeV/u Au+Au collision measured with HADES detector**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Mrs BEHNKE, Claudia (Institut fuer Kernphysik, Goethe-Universitaet, Frankfurt, Germany)

**Session Classification:** Poster Session

Contribution ID: 24

Type: **not specified**

## **HADES-02-Probing the EOS with HADES?**

**Presenter:** Ms SCHULDES, Heidi (HADES-GSI Darmstadt and Goethe-Universität, Frankfurt am Main)

Contribution ID: 25

Type: **not specified**

## **PANDA-01-Optical Properties of Radiators for the PANDA Barrel DIRC**

**Presenter:** Mr KALICY, Grzegorz (HadronPhysik1-GSI Darmstadt)

Contribution ID: 26

Type: **not specified**

## **PANDA-02-A Barrel DIRC using radiator plates**

**Presenter:** Mr ZUEHLSDORF, Marko (HadronPhysik1-GSI Darmstadt and Goethe University, Frankfurt am Main)

Contribution ID: 27

Type: **not specified**

## **Material-01-Fatigue Behaviour of the Graphite Exposed to Heavy Ion Beams**

Contribution ID: 28

Type: **not specified**

## **Material-02-Ion Track Technology and Nanostructuring**

**Presenter:** Ms KRIEG, Janina (MaterialForschung-GSI Darmstadt)

Contribution ID: 29

Type: **not specified**

## **Theory-01-Operator representation for effective realistic interactions**

**Presenter:** Dr WEBER, Dennis (Theory-GSI Darmstadt)

Contribution ID: **30**

Type: **not specified**

## **PlasmaPhysik-01-LIGHT and beyond**

**Presenter:** BUSOLD, Simon (PlasmaPhysik-GSI Darmstadt and TU Darmstadt)



Contribution ID: 31

Type: **not specified**

## **PlasmaPhysik-02-The detector for the PRIOR proton microscope**

**Presenter:** Mr LANG, Philipp-Michael (PlasmaPhysik-GSI Darmstadt and TU Darmstadt)

Contribution ID: 32

Type: **not specified**

## **NUSTAR-03-FRS Ion Catcher: Setup, Status and Perspectives**

**Presenter:** REITER, Moritz Pascal (FRS/SFRS-GSI Darmstadt and Justus Liebig Universität Giessen)

Contribution ID: 33

Type: **not specified**

## **NUSTAR-02-A New Approach to Isobar Separation and Mass Measurements of Low Energy Radioactive Ion Beams**

**Presenter:** EBERT, Jens (KernPhysik-GSI Darmstadt and Justus Liebig Universität, Giessen)

Contribution ID: 34

Type: **not specified**

## **NUSTAR-04-Experimental Search for $\eta'$ Mesic Nuclei with the (p,d) Reaction at GSI and FAIR**

**Presenter:** Ms TANAKA, Yoshika (FRS/SFRs-GSI Darmstadt and University of Tokyo, Japan)

Contribution ID: 35

Type: **not specified**

## **AcceleratorPhysik-03- Intensity Dependent Effects in Heavy Ion Synchrotrons**

**Presenter:** Mr GOERGEN, Paul (FAIR@GSI Darmstadt and TU Darmstadt)

Contribution ID: 36

Type: **not specified**

## **FAIR and Future Perspectives**

*Monday, 11 August 2014 14:30 (20 minutes)*

**Presenter:** Dr LEHMANN, Inti (Deputy Research Director, FAIR GmbH)

**Session Classification:** Perspectives

Contribution ID: 37

Type: **not specified**

## **Preparation before you apply for JOB**

**Presenter:** TBA

Contribution ID: **38**

Type: **not specified**

## **CBM01- The CBM Silicon Tracking System**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** LARIONOV, Pavel (Goethe-Universität Frankfurt(UFfm-IKP))

**Session Classification:** Poster Session



Contribution ID: 39

Type: **not specified**

## **CBM02 - Standalone First Level Event Selection Package**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Ms AKISHINA, Valentina (Frankfurt University)

**Session Classification:** Poster Session

Contribution ID: 40

Type: **not specified**

## **ALICE01- Estimates of heavy-ion collision symmetry planes**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Mr ONDERWAATER, Jaap (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 41

Type: **not specified**

# **ALICE02- Feasibility Study of $\chi_c$ identification with ALICE**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Mr WEBER, Steffen (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 42

Type: **not specified**

## **AtomicPhysics01- Laser Spectroscopy of the Element Nobelium at SHIPTRAP**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** LAUTENSCHLÄGER, Felix (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 43

Type: **not specified**

## **AtomicPhysics02- PEGASUS: Building an intense spin-polarized electron gun**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** SCHURY, Daniel (Justus Leibig University, Giessen - (JLU))

**Session Classification:** Poster Session

Contribution ID: 44

Type: **not specified**

## **BioPhysics01- Influence of shear stress on the anti-inflammatory response to low-dose ionizing radiation**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** ERBELDINGER, Nadine (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 45

Type: **not specified**

## **BioPhysics02- Combining multiple fields and ITV-PTV margins for motion mitigation using NSCLC sequential 4DCTs**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** BREVET, Romain (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 46

Type: **not specified**

## **HADES02- Charged Kaon- and Phi-Meson-Reconstruction in Au+Au-Collisions at 1.23 AGeV**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Mrs SCHULDES, Heidi (IKF, Goethe-Universität)

**Session Classification:** Poster Session



Contribution ID: 47

Type: **not specified**

## **R3B01- Quasi-free single-nucleon knockout reactions on neutron-rich Oxygen Isotopes**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Ms ATAR, Leyla (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 48

Type: **not specified**

## **R3B02- Reactions of neutron-rich Sn-Isotopes investigated at relativistic energies at R3B**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** SCHINDLER, Fabia (TU-Darmstadt)

**Session Classification:** Poster Session

Contribution ID: 49

Type: **not specified**

## **PrimaryBeams01- Systematic Measurement of the Pumping Capabilities of Cryogenic Surfaces**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** CHILL, Frederic (Goethe University, Frankfurt am Main - (GU))

**Session Classification:** Poster Session

Contribution ID: 50

Type: **not specified**

## **PrimaryBeams02- Heavy Ion Induced Desorption Measurements on Cryogenic Targets**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** MAURER, Christoph (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 51

Type: **not specified**

## **PrimaryBeams03- Electrical integrity and its protection for reliable operation of superconducting machines**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Mr SZWANGRUBER, Piotr (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 52

Type: **not specified**

## **PlasmaPhysics01- High energy ion acceleration and neutron production using relativistic transparency in solids**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Mr DEPPERT, Oliver (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 53

Type: **not specified**

## **PlasmaPhysics02- LIGHT – a laser-driven proton beamline**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** JAHN, Diana (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 54

Type: **not specified**

## **PlasmaPhysics03- Isobaric heated carbon near the solid-liquid phase transition in the 1Mbar regime**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** HELFRICH, Jan (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session



Contribution ID: 55

Type: **not specified**

## **Material01- Zinc Oxide 3D Nanowire Networks Fabricated by Ion-track Technology and Electrodeposition**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Ms MOVSESYAN, Liana (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 56

Type: **not specified**

## **Material02- Al<sub>2</sub>O<sub>3</sub>, TiO<sub>2</sub>, and SiO<sub>2</sub>-nanotubes synthesised by ion-track technology and ALD**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Ms SPENDE, Anna (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 57

Type: **not specified**

## **Material03- Intense Heavy Ion Beam Induced Effects in Carbon Based Materials**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Ms KUPKA, Katharina (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 58

Type: **not specified**

## **Material04- Dealloying of electrochemically grown Au-Ag nanowires**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** BURR, Loïc (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 59

Type: **not specified**

## **Accelerator01- First Idea on Bunch to Bucket Transfer for FAIR**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Ms BAI, Jiaoni (Goethe University, Frankfurt am Main - (GU))

**Session Classification:** Poster Session

Contribution ID: **60**

Type: **not specified**

## **Theory01- Two-body scattering processes for low energies with chiral perturbation theory**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Mr FUHRMANN, Hans F (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 61

Type: **not specified**

## **Theory02- Modelling Light exotic nuclei in Fermionic Molecular Dynamics**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** Ms HENNINGER, Katharine (Technical University, Darmstadt - (TU))

**Session Classification:** Poster Session

Contribution ID: 62

Type: **not specified**

## **Theory03- Investigating the transition interfaces in hybrid approaches**

*Monday, 11 August 2014 15:35 (1h 15m)*

**Presenter:** OLIINYCHENKO, Dmytro (Frankfurt Institute for Advanced Studies - (FIAS))

**Session Classification:** Poster Session