

# **HIE-ISOLDE Physics Workshop 2023**

## **Report of Contributions**

Contribution ID: 2

Type: **not specified**

## Enhancement of oblate collectivity in $^{66}\text{Ge}$

*Thursday, 25 May 2023 16:15 (20 minutes)*

**Primary author:** Dr ABRAHAMS, Kenzo (University of the Western Cape)

**Co-authors:** ORCE GONZALEZ, Jose Nicolas (University of the Western Cape (ZA)); GAFFNEY, Liam (University of Liverpool (GB))

**Presenter:** ORCE GONZALEZ, Jose Nicolas (University of the Western Cape (ZA))

**Session Classification:** Physics session

Contribution ID: 3

Type: **not specified**

## **Investigating single-particle properties outside of $N=127$ using the $^{212}\text{Rn}(d,p)^{213}\text{Rn}$ reaction.**

*Wednesday, 24 May 2023 11:55 (20 minutes)*

**Primary author:** CLARKE, Daniel (University of Manchester (GB))

**Presenter:** CLARKE, Daniel (University of Manchester (GB))

**Session Classification:** Physics session

Contribution ID: 4

Type: **not specified**

## **The HELIOS and SOLARIS programs and their complementarity to ISS**

*Wednesday, 24 May 2023 11:30 (25 minutes)*

**Primary author:** KAY, Benjamin Peter (Argonne National Laboratory (US))

**Presenter:** KAY, Benjamin Peter (Argonne National Laboratory (US))

**Session Classification:** Physics session

Contribution ID: 5

Type: **not specified**

## **Onset of deformation in the neutron-rich krypton isotopes via transfer reactions with the ISOLDE Solenoidal Spectrometer**

*Thursday, 25 May 2023 16:55 (20 minutes)*

**Primary author:** DOLAN, Annie (University of Liverpool (GB))

**Presenter:** DOLAN, Annie (University of Liverpool (GB))

**Session Classification:** Physics session

Contribution ID: 6

Type: **not specified**

## Scattering of 15C on 208Pb at energies near the Coulomb barrier. IS619.

*Thursday, 25 May 2023 10:45 (20 minutes)*

**Primary author:** GARCIA TAVORA, Vicente (Consejo Superior de Investigaciones Cientificas (CSIC) (ES))

**Co-authors:** GARCIA BORGE, Maria Jose (Consejo Superior de Investigaciones Cientificas (CSIC) (ES)); TENGBLAD, Olof (Consejo Superior de Investigaciones Cientificas (CSIC) (ES))

**Presenter:** GARCIA TAVORA, Vicente (Consejo Superior de Investigaciones Cientificas (CSIC) (ES))

**Session Classification:** Physics session

Contribution ID: 7

Type: **not specified**

## **Performance of the SpecMAT active target in a strong magnetic field**

*Friday, 26 May 2023 11:15 (25 minutes)*

**Primary author:** POLESHCHUK, Oleksii (KU Leuven, Institute for Nuclear and Radiation Physics)

**Presenter:** POLESHCHUK, Oleksii (KU Leuven, Institute for Nuclear and Radiation Physics)

**Session Classification:** Physics session

Contribution ID: 8

Type: **not specified**

## IS690: Exploring the excited structure of $^{11}\text{Li}$

*Friday, 26 May 2023 10:15 (20 minutes)*

**Primary author:** FERNANDEZ RUIZ, Daniel (Consejo Superior de Investigaciones Cientificas (CSIC) (ES))

**Co-authors:** FYNBO, Hans (Aarhus University (DK)); MARTEL BRAVO, Ismael (University of Huelva (ES)); RIISAGER, Karsten (Aarhus University (DK)); GARCIA BORGE, Maria (CSIC Madrid); TENG-BLAD, Olof (Consejo Superior de Investigaciones Cientificas (CSIC) (ES))

**Presenter:** FERNANDEZ RUIZ, Daniel (Consejo Superior de Investigaciones Cientificas (CSIC) (ES))

**Session Classification:** Physics session



Contribution ID: 9

Type: **not specified**

## Investigations of proton-halo effects with 8B beam

*Thursday, 25 May 2023 10:20 (25 minutes)*

**Primary author:** DI PIETRO, Alessia Francesca (Universita e INFN, Catania (IT))

**Co-author:** DI PIETRO, alessia (INFN)

**Presenter:** DI PIETRO, Alessia Francesca (Universita e INFN, Catania (IT))

**Session Classification:** Physics session

Contribution ID: **10**

Type: **not specified**

## **ISS: status and future plans**

*Wednesday, 24 May 2023 11:05 (25 minutes)*

**Primary author:** MACGREGOR, Patrick (CERN)

**Presenter:** MACGREGOR, Patrick (CERN)

**Session Classification:** Physics session

Contribution ID: 11

Type: **not specified**

## **Miniball refurbished for physics at HIE-ISOLDE**

*Wednesday, 24 May 2023 13:45 (25 minutes)*

**Primary author:** BROWNE, Frank (CERN)

**Presenter:** BROWNE, Frank (CERN)

**Session Classification:** Physics session

Contribution ID: 12

Type: **not specified**

## **Coulomb excitation of $^{142}\text{Xe}$ with Miniball and the challenges in experiments populating many levels**

*Thursday, 25 May 2023 15:50 (25 minutes)*

**Primary author:** HENRICH, Corinna (Technische Universitaet Darmstadt (DE))

**Presenter:** HENRICH, Corinna (Technische Universitaet Darmstadt (DE))

**Session Classification:** Physics session

Contribution ID: 13

Type: **not specified**

## Shape coexistence in neutron-deficient $^{190}\text{Pb}$

*Thursday, 25 May 2023 15:05 (20 minutes)*

**Primary author:** MONTES PLAZA, Adrian (University of Jyväskylä & University of Liverpool)

**Co-authors:** PAKARINEN, Janne (University of Jyväskylä (FI)); PAPADAKIS, Filippos (STFC Daresbury Laboratory (GB)); HERZBERG, Rolf-Dietmar (U); GREENLEES, Paul Thomas (University of Jyväskylä (FI))

**Presenter:** MONTES PLAZA, Adrian (University of Jyväskylä & University of Liverpool)

**Session Classification:** Physics session

Contribution ID: 14

Type: **not specified**

## The first experiment employing the SPEDE spectrometer at HIE-ISOLDE

*Friday, 26 May 2023 09:50 (25 minutes)*

**Primary author:** OJALA, Joonas Kalervo (University of Liverpool (GB))

**Presenter:** OJALA, Joonas Kalervo (University of Liverpool (GB))

**Session Classification:** Physics session

Contribution ID: 15

Type: **not specified**

## Approaching the p-process path: alpha scattering of radioactive Sn nuclei

*Thursday, 25 May 2023 12:15 (25 minutes)*

**Primary authors:** GALAVIZ REDONDO, Daniel (LIP - Laboratorio de Instrumentação e Física Experimental de Partículas (PT)); SANTOS LIMA GERALDES BARBA, Francisco Maria (LIP - Laboratorio de Instrumentação e Física Experimental de Partículas (PT))

**Presenter:** SANTOS LIMA GERALDES BARBA, Francisco Maria (LIP - Laboratorio de Instrumentação e Física Experimental de Partículas (PT))

**Session Classification:** Physics session

Contribution ID: 16

Type: **not specified**

## A new (d,p) reaction on $^{11}\text{Be}$ : Bring clarity to our understanding of $^{12}\text{Be}$

*Thursday, 25 May 2023 09:30 (25 minutes)*

**Primary author:** CHEN, Jie (Argonne National Laboratory (US))

**Presenter:** CHEN, Jie (Argonne National Laboratory (US))

**Session Classification:** Physics session



Contribution ID: 17

Type: **not specified**

## **Commissioning of Miniball@HIE-ISOLDE and first results from Coulomb excitation of $^{130}\text{Sn}$**

*Friday, 26 May 2023 09:30 (20 minutes)*

**Primary author:** DROSTE, Maximilian Paul (Universitaet zu Koeln (DE))

**Presenter:** DROSTE, Maximilian Paul (Universitaet zu Koeln (DE))

**Session Classification:** Physics session

Contribution ID: 18

Type: **not specified**

## **Next-generation experiments with the Active Target Time Projection Chamber (AT-TPC)**

*Thursday, 25 May 2023 14:45 (20 minutes)*

**Primary author:** NOT SUPPLIED, AYYAD LIMONGE FRANCESC YASSID

**Presenter:** NOT SUPPLIED, AYYAD LIMONGE FRANCESC YASSID

**Session Classification:** Physics session

Contribution ID: 19

Type: **not specified**

## **Transfer reactions with low intensity radioactive ion beams in ISS**

*Friday, 26 May 2023 12:00 (20 minutes)*

**Primary author:** CEULEMANS, Andreas (KU Leuven (BE))

**Co-author:** Prof. RAABE, Riccardo (KU Leuven)

**Presenter:** CEULEMANS, Andreas (KU Leuven (BE))

**Session Classification:** Physics session

Contribution ID: 20

Type: **not specified**

## The Oslo Method at HIE-ISOLDE

*Wednesday, 24 May 2023 14:55 (20 minutes)*

**Primary author:** Dr INGEBERG, Vetle Wegner (University of Oslo (NO))

**Presenter:** Dr INGEBERG, Vetle Wegner (University of Oslo (NO))

**Session Classification:** Physics session

Contribution ID: 21

Type: **not specified**

## Fission barrier measurements at ISS

*Wednesday, 24 May 2023 15:40 (20 minutes)*

**Primary author:** MANAGLIA, Maria Vittoria (Chalmers University of Technology (SE))

**Co-authors:** Prof. HEINZ, Andreas (Chalmers University of Technology); KAWECKA, Anna (Chalmers University of Technology); Prof. JONSON, Björn (Chalmers University of Technology); TÖRNQVIST, Hans (Chalmers University of Technology); JOHANSSON, Håkan (Chalmers University of Technology); Prof. NILSSON, Thomas

**Presenter:** MANAGLIA, Maria Vittoria (Chalmers University of Technology (SE))

**Session Classification:** Physics session

Contribution ID: 23

Type: **not specified**

## The HISTARS project

*Wednesday, 24 May 2023 14:10 (20 minutes)*

**Primary author:** Prof. FRAILE, Luis M (Universidad Complutense (ES))

**Presenter:** Prof. FRAILE, Luis M (Universidad Complutense (ES))

**Session Classification:** Physics session

Contribution ID: 24

Type: **not specified**

## Study of the $^{10}\text{Be}(t,p)^{12}\text{Be}$ reaction with the SOLARIS spectrometer

*Thursday, 25 May 2023 14:25 (20 minutes)*

**Primary authors:** MUÑOZ RAMOS, Alicia; KAY, Benjamin (Argonne National Laboratory); Dr ALVAREZ POL, Héctor (IGFAE - USC); AYYAD, Yassid

**Presenter:** MUÑOZ RAMOS, Alicia

**Session Classification:** Physics session

Contribution ID: 25

Type: **not specified**

## The HiCARI campaign at RIKEN

*Thursday, 25 May 2023 14:00 (25 minutes)*

**Primary author:** WIMMER, Kathrin (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE))

**Presenter:** WIMMER, Kathrin (GSI - Helmholtzzentrum für Schwerionenforschung GmbH (DE))

**Session Classification:** Physics session



Contribution ID: 26

Type: **not specified**

## **HIE ISOLDE status and prospects for the '23 run**

*Wednesday, 24 May 2023 13:20 (25 minutes)*

**Primary authors:** SIESLING, Erwin (CERN); RODRIGUEZ, Jose Alberto (CERN)

**Presenter:** SIESLING, Erwin (CERN)

**Session Classification:** Physics session

Contribution ID: 27

Type: **not specified**

## **Astrophysical reaction prospects at HIE-ISOLDE with the ISS and active targets**

*Thursday, 25 May 2023 11:30 (25 minutes)*

**Primary author:** DIGET, Christian Aaen (University of York)

**Presenter:** DIGET, Christian Aaen (University of York)

**Session Classification:** Physics session

Contribution ID: 28

Type: **not specified**

## The ISRS project: status and perspectives

*Wednesday, 24 May 2023 15:15 (25 minutes)*

**Primary author:** MARTEL BRAVO, Ismael (University of Huelva (ES))

**Presenter:** MARTEL BRAVO, Ismael (University of Huelva (ES))

**Session Classification:** Physics session

Contribution ID: 29

Type: **not specified**

## **Evolution of single-particle trends outside the N=16 isotones, the $^{27}\text{Na}(d,p)$ reaction at ISS**

*Wednesday, 24 May 2023 12:15 (20 minutes)*

**Primary author:** REEVE, Samuel

**Presenter:** REEVE, Samuel

**Session Classification:** Physics session

Contribution ID: **30**

Type: **not specified**

## SEC Overview

*Thursday, 25 May 2023 09:55 (25 minutes)*

**Primary author:** TENGBLAD, Olof (Consejo Superior de Investigaciones Cientificas (CSIC) (ES))

**Presenter:** TENGBLAD, Olof (Consejo Superior de Investigaciones Cientificas (CSIC) (ES))

**Session Classification:** Physics session

Contribution ID: 31

Type: **not specified**

## Coulomb excitation of $^{206}\text{Hg}$ at Miniball

*Thursday, 25 May 2023 16:35 (20 minutes)*

**Primary authors:** PODOLYAK, Zsolt (University of Surrey (GB)); PODOLYAK, Zsolt (University of Surrey)

**Presenter:** PODOLYAK, Zsolt (University of Surrey (GB))

**Session Classification:** Physics session

Contribution ID: 32

Type: **not specified**

## The $7\text{Be} + \text{d}$ reaction in the context of the cosmological lithium problem

*Thursday, 25 May 2023 11:55 (20 minutes)*

**Primary author:** GUPTA, Dhruva (Bose Institute (IN))

**Co-author:** MARTEL BRAVO, Ismael (University of Huelva (ES))

**Presenter:** MARTEL BRAVO, Ismael (University of Huelva (ES))

**Session Classification:** Physics session

Contribution ID: 33

Type: **not specified**

## **Coulomb excitation of the neutron-deficient tin isotopes**

*Friday, 26 May 2023 11:40 (20 minutes)*

**Primary author:** CEDERKALL, Joakim (Lund University (SE))

**Presenter:** CEDERKALL, Joakim (Lund University (SE))

**Session Classification:** Physics session



Contribution ID: 34

Type: **not specified**

## Open access publishing in Journal of Physics G

*Friday, 26 May 2023 11:00 (15 minutes)*

**Primary author:** TROTTER, Iain (IOP Publishing)

**Presenter:** TROTTER, Iain (IOP Publishing)

**Session Classification:** Physics session

Contribution ID: 35

Type: **not specified**

## Welcome and introduction

*Wednesday, 24 May 2023 11:00 (5 minutes)*

**Primary author:** GAFFNEY, Liam (University of Liverpool (GB))

**Presenter:** GAFFNEY, Liam (University of Liverpool (GB))

**Session Classification:** Welcome