

# **Spontaneous and induced fission of very heavy and super-heavy nuclei**



## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

# Welcome

*Monday 9 April 2018 10:30 (30 minutes)*

**Presenter:** VARDACI, Emanuele (Università degli studi di Napoli)

Contribution ID: 2

Type: **not specified**

# Super-Heavy Nuclei:production and decay properties

*Monday 9 April 2018 14:30 (50 minutes)*

**Presenter:** MÖLLER , Peter (LANL, Los Alamos)

**Session Classification:** Session 2

Contribution ID: 3

Type: **not specified**

# Welcome

Contribution ID: 4

Type: **not specified**

## Fission of heaviest nuclei

*Monday 9 April 2018 11:00 (50 minutes)*

**Presenter:** Dr OGANESSION, Yuri (JINR Dubna)

**Session Classification:** Session 1

Contribution ID: 5

Type: **not specified**

## **Predictions Fission Fragment Mass Distributions for Super-Heavy Elements**

*Monday 9 April 2018 11:50 (50 minutes)*

**Presenter:** Dr CARJAN, Nicolae (JINR Dubna & NIPNE-HH Bucharest)

**Session Classification:** Session 1

Contribution ID: 6

Type: **not specified**

# Spontaneous Fission Properties of Super-Heavy Nuclei

*Monday 9 April 2018 15:20 (50 minutes)*

**Presenter:** HESSBERGER, Fritz P. (GSI, Darmstadt)

**Session Classification:** Session 2

Contribution ID: 7

Type: **not specified**

## Alpha Decay and Fission of High-K Isomers

*Monday 9 April 2018 16:30 (50 minutes)*

**Presenter:** CLARK, Roderick (LBNL, Berkeley)

**Session Classification:** Session 2



Contribution ID: 8

Type: **not specified**

## **SHE-FACTORY: A New Facility for Super-Heavy Element Research**

*Tuesday 10 April 2018 09:30 (50 minutes)*

**Presenter:** DMITRIEV, Sergey (JINR, Dubna)

**Session Classification:** Session 3

Contribution ID: 9

Type: **not specified**

## **Impact of quasifission on SHE production**

*Tuesday 10 April 2018 10:20 (50 minutes)*

**Presenter:** ITKIS , Mikhail (JINR, Dubna)

**Session Classification:** Session 3

Contribution ID: **10**

Type: **not specified**

## **Production of neutron-rich heavy and super-heavy nuclei in multinucleon transfer reactions**

*Tuesday 10 April 2018 11:30 (50 minutes)*

**Presenter:** KARPOV , Alexander (JINR, Dubna)

**Session Classification:** Session 4

Contribution ID: 11

Type: **not specified**

## **Dynamical effects of superfluidity on multi-nucleon transfer, fusion and fission**

*Tuesday 10 April 2018 12:20 (50 minutes)*

**Presenter:** SCAMPS, Guillaume (University of Tsukuba)

**Session Classification:** Session 4

Contribution ID: 12

Type: **not specified**

## **Symmetric, asymmetric and super-asymmetric modes in fission and quasifission of heavy and super-heavy nuclei**

*Tuesday 10 April 2018 14:30 (50 minutes)*

**Presenter:** ITKIS , Iulia (JINR, Dubna)

**Session Classification:** Session 5

Contribution ID: 13

Type: **not specified**

## **Microscopic studies of fission dynamics based on energy density functionals**

*Tuesday 10 April 2018 15:20 (50 minutes)*

**Presenter:** VRETENAR, Dario (University of Zagreb)

**Session Classification:** Session 5

Contribution ID: 14

Type: **not specified**

# **Time-dependent Density Functional Theory for nuclear reactions –advantages and disadvantages**

*Tuesday 10 April 2018 16:30 (50 minutes)*

**Presenter:** MAGIERSKI, Piotr (Warsaw University)

**Session Classification:** Session 5

Contribution ID: 15

Type: **not specified**

## Super-heavy Element Research at GSI

*Wednesday 11 April 2018 09:30 (50 minutes)*

**Presenter:** BLOCK , Michael (GSI, Darmstadt)

**Session Classification:** Session 6



Contribution ID: 16

Type: **not specified**

## **Fission Barriers of Super-Heavy Nuclei and Search for Element 120**

*Wednesday 11 April 2018 10:20 (50 minutes)*

**Presenter:** HOFMANN, Sigurd (GSI, Darmstadt)

**Session Classification:** Session 6

Contribution ID: 17

Type: **not specified**

## **The SPES project at the INFN- Laboratori Nazionali di Legnaro**

*Wednesday 11 April 2018 11:30 (50 minutes)*

**Presenter:** PRETE, Gianfranco (Laboratori Nazionali di Legnaro)

**Session Classification:** Session 7

Contribution ID: **18**

Type: **not specified**

## **Exotic nuclei and the SPES radioactive ion beam facility**

*Wednesday 11 April 2018 12:20 (50 minutes)*

**Presenter:** DE ANGELIS, Giacomo (Laboratori Nazionali di Legnaro)

**Session Classification:** Session 7

Contribution ID: **19**

Type: **not specified**

## **Contributions to the science program at the SHE Factory and SPES**

*Wednesday 11 April 2018 14:30 (50 minutes)*

**Presenter:** RYKACZEWSKI, Krzysztof (ORNL, Oak Ridge)

**Session Classification:** Session 8

Contribution ID: 20

Type: **not specified**

## **Radioactive ion beams for the fission study of the heaviest neutron-rich nuclei**

*Wednesday 11 April 2018 15:20 (50 minutes)*

**Presenter:** TER-AKOPIAN, Gurgen (JINR, Dubna)

**Session Classification:** Session 8

Contribution ID: 21

Type: **not specified**

## **Secondary heavy ion beams as a tool for investigation of fusion mechanism**

*Wednesday 11 April 2018 16:30 (50 minutes)*

**Presenter:** CHUBARIAN , Greg (Cyclotron Lab, Texas A & M)

**Session Classification:** Session 8

Contribution ID: 22

Type: **not specified**

## **Theory of spontaneous fission of super heavy nuclei and its competitor decay modes**

*Thursday 12 April 2018 09:30 (50 minutes)*

**Presenter:** POENARU , Dorin (Horia Hulubei National Institute, Bucharest)

**Session Classification:** Session 9

Contribution ID: 23

Type: **not specified**

# **Spontaneous Fission of SHE: A New Source of Insights into the Structure of Neutron-Rich Nuclei**

*Thursday 12 April 2018 10:20 (50 minutes)*

**Presenter:** ZACHARY, Christopher

**Session Classification:** Session 9



Contribution ID: 24

Type: **not specified**

## **Fission hindrance of heaviest high-K isomers**

*Thursday 12 April 2018 11:30 (50 minutes)*

**Presenter:** KOWAL , Michal (NCBJ, Warsaw)

**Session Classification:** Session 10

Contribution ID: 25

Type: **not specified**

## **From instantons to spontaneous fission rates**

*Thursday 12 April 2018 12:20 (50 minutes)*

**Presenter:** SKALSKI, Janusz (NCBJ, Warsaw)

**Session Classification:** Session 10

Contribution ID: 26

Type: **not specified**

## **An instanton-motivated approach to the spontaneous fission of odd nuclei**

*Thursday 12 April 2018 14:30 (50 minutes)*

**Presenter:** BRODZIŃKI, Wojciech (NCBJ, Warsaw)

**Session Classification:** Session 11

Contribution ID: 27

Type: **not specified**

## **Half-lives of nuclei around the super-heavy nucleus 304120**

*Thursday 12 April 2018 15:20 (50 minutes)*

**Presenter:** SILISTEANU , Ion

**Session Classification:** Session 11

Contribution ID: 28

Type: **not specified**

## **Probing the evolution of the fission modes with a microscopic approach**

*Thursday 12 April 2018 16:30 (50 minutes)*

**Presenter:** REGNIER , David (IPN, Orsay)

**Session Classification:** Session 11

Contribution ID: 29

Type: **not specified**

## **Correspondence between cluster radioactivity of and asymmetric fission of super-heavy nuclei**

*Friday 13 April 2018 09:30 (50 minutes)*

**Presenter:** WARDA , Michal (UMCS, Lublin)

**Session Classification:** Session 12

Contribution ID: **30**

Type: **not specified**

## Cluster emission in $^{294}\text{Og}$

*Friday 13 April 2018 10:20 (50 minutes)*

**Presenter:** MATHESON , Zachary (Michigan State University)

**Session Classification:** Session 12