

International Conference «50 Years of Cold Fusion»

Report of Contributions

Contribution ID: **81**

Type: **not specified**

Opening

Wednesday 20 November 2024 09:30 (15 minutes)

Presenters: ASHOT SAGHYAN (NAS RA, President); GRIGORY TRUBNIKOV (JINR, Director); ROUBEN AROUTIOUNIAN (NAS RA, Academician-secretary of the Division of Natural Sciences)

Session Classification: SHE Cold Fusion Synthesis

Contribution ID: 82

Type: **not specified**

A timeline of the important theoretical developments leading to our current insights into heavy-element stability

Wednesday 20 November 2024 09:45 (30 minutes)

Presenter: MÖLLER, Peter (Lund University, Sweden)

Session Classification: SHE Cold Fusion Synthesis

Contribution ID: **83**

Type: **not specified**

Cold fusion of massive nuclei

Wednesday 20 November 2024 10:15 (30 minutes)

Presenter: OGANESSIAN, Yuri (JINR)

Session Classification: SHE Cold Fusion Synthesis

Contribution ID: 85

Type: **not specified**

Cold fusion: from element discovery to detailed studies. An overview from GSI

Wednesday 20 November 2024 11:15 (30 minutes)

Presenter: CHRISTOPH DÜLLMANN (GSI, Germany)

Session Classification: SHE Cold Fusion Synthesis

Contribution ID: 86

Type: **not specified**

From early fusion, to cold fusion, and to hot fusion. A long way on SHE

Wednesday 20 November 2024 11:45 (30 minutes)

Presenter: FENG-SHOU ZHANG (Beijing Normal University, China)

Session Classification: SHE Cold Fusion Synthesis

Contribution ID: 87

Type: **not specified**

SHE Cold Fusion Synthesis: How Well Do We Understand the Reaction Mechanism?

Wednesday 20 November 2024 15:00 (30 minutes)

Presenter: MICHAL KOWAL (NCBJ, Poland)

Session Classification: SHE Cold Fusion Synthesis

Contribution ID: **88**

Type: **not specified**

Synthesis of New Superheavy Nuclei in Reactions of 50Ti, 51V, and 54Cr Beams with Actinide Targets

Wednesday 20 November 2024 15:30 (30 minutes)

Presenter: TOMASZ CAP (NCBJ, Poland)

Session Classification: SHE Cold Fusion Synthesis

Contribution ID: 89

Type: **not specified**

Superheavy nucleus production in massive fusion and multinucleon transfer reactions

Wednesday 20 November 2024 16:00 (30 minutes)

Presenter: ZHAO-QING FENG (South China University of Technology, China)

Session Classification: SHE Cold Fusion Synthesis

Contribution ID: **90**

Type: **not specified**

From cold fusion to hot fission

Wednesday 20 November 2024 17:00 (30 minutes)

Presenter: JADAMBAA KHUYAGBAATAR (GSI, Germany)

Session Classification: SHE Cold Fusion Synthesis

Contribution ID: 91

Type: **not specified**

New perspectives for cold and hot fusion reactions

Wednesday 20 November 2024 17:30 (30 minutes)

Presenter: GURGEN ADAMIAN (JINR)

Session Classification: SHE Cold Fusion Synthesis

Contribution ID: 92

Type: **not specified**

Towards a novel quantum dynamical model for reactions forming superheavy elements

Wednesday 20 November 2024 18:00 (30 minutes)

Presenter: ALEXIS DIAZ-TORRES (University of Surrey, United Kingdom)

Session Classification: SHE Cold Fusion Synthesis

Contribution ID: 93

Type: **not specified**

Status of the gas-filled separator SHANS2

Thursday 21 November 2024 09:00 (30 minutes)

Presenter: ZAIGUO GAN (MP CAS, China)

Session Classification: Physics of SHE

Contribution ID: 94

Type: **not specified**

Synthesis of Superheavy Elements at RIKEN

Thursday 21 November 2024 09:30 (30 minutes)

Presenter: HIROMITSU HABA (RIKEN, Japan)

Session Classification: Physics of SHE

Contribution ID: 95

Type: **not specified**

Status of accelerator-based SHE Factory

Thursday 21 November 2024 10:00 (30 minutes)

Presenter: GEORGY GULBEKIAN (JINR)

Session Classification: Physics of SHE

Contribution ID: 96

Type: **not specified**

On the way to synthesis of elements 119 and 120

Thursday 21 November 2024 10:30 (30 minutes)

Presenter: NIKITA KOVRIZHNYKH (JINR)

Session Classification: Physics of SHE

Contribution ID: 97

Type: **not specified**

Relativistic effects in the electronic structure of the superheavy elements

Thursday 21 November 2024 11:30 (30 minutes)

Presenter: ILYA TUPITSYN (SPbSU, Russia)

Session Classification: Chemistry of SHE

Contribution ID: 98

Type: **not specified**

Relativistic effects on properties of the elements at the end of the Periodic Table

Thursday 21 November 2024 12:00 (30 minutes)

Presenter: VALERIA PERSHINA (GSI, Germany)

Session Classification: Chemistry of SHE

Contribution ID: 99

Type: **not specified**

Highly-precise atomic calculations of heavy and superheavy elements: status and perspectives

Thursday 21 November 2024 12:30 (30 minutes)

Presenter: EPHRAIM ELLAV (Tel Aviv University, Israel)

Session Classification: Chemistry of SHE

Contribution ID: **100**

Type: **not specified**

SHE chemistry developments at the Laboratory of Radiochemistry PSI Switzerland

Thursday 21 November 2024 14:30 (30 minutes)

Presenter: ROBERT EICHLER (PSI, Switzerland)

Session Classification: Chemistry of SHE

Contribution ID: **101**

Type: **not specified**

Status of the Nihonium chemistry at IMP

Thursday 21 November 2024 15:00 (30 minutes)

Presenter: ZHI QIN (IMP CAS, China)

Session Classification: Chemistry of SHE

Contribution ID: **102**

Type: **not specified**

SC-Recoil separator GASSOL. The first step of fast chemistry

Thursday 21 November 2024 15:30 (30 minutes)

Presenter: DMITRY SOLOVYOV (JINR)

Session Classification: Chemistry of SHE

Contribution ID: **104**

Type: **not specified**

Transport and adsorption modeling of a gas chromatography experiment of SHE

Thursday 21 November 2024 16:00 (30 minutes)

Presenter: ANDREY ASTAKHOV (JINR)

Session Classification: Chemistry of SHE

Contribution ID: 105

Type: **not specified**

Structure and fission properties of heavy and superheavy nuclei

Friday 22 November 2024 09:30 (30 minutes)

Presenter: SHAN-GUI ZHOU (Institute of Theoretical Physics CAS, China)

Session Classification: Properties of SHE

Contribution ID: 106

Type: **not specified**

New experimental results on the symmetric fission in neutron-rich transfermium nuclei

Friday 22 November 2024 10:00 (30 minutes)

Presenter: MASATO ASAI (JAEA, Japan)

Session Classification: Properties of SHE

Contribution ID: **107**

Type: **not specified**

Spontaneous fission of heaviest nuclei synthesized in FLNR

Friday 22 November 2024 10:30 (30 minutes)

Presenter: ALEXANDR SVIRIKHIN (JINR)

Session Classification: Properties of SHE

Contribution ID: **108**

Type: **not specified**

Solid-state nuclear track detectors in the study of rare spontaneous fission events

Friday 22 November 2024 11:30 (30 minutes)

Presenter: TATYANA TRETYAKOVA (SINP MSU, Russia)

Session Classification: Properties of SHE

Contribution ID: **109**

Type: **not specified**

Manifestation of clustering in fission of heavy nuclei

Friday 22 November 2024 12:00 (30 minutes)

Presenter: HORIA PASCA (Cluj University, Romania)

Session Classification: Properties of SHE

Contribution ID: 110

Type: **not specified**

Fission and alpha decay of heavy and superheavy nuclei in cluster approach

Friday 22 November 2024 12:30 (30 minutes)

Presenter: IVAN ROGOV (JINR)

Session Classification: Properties of SHE

Contribution ID: 111

Type: **not specified**

Quasifission in fusion reactions

Friday 22 November 2024 14:30 (30 minutes)

Presenter: GALINA KNYAZHEVA (JINR)

Session Classification: Properties of SHE

Contribution ID: 112

Type: **not specified**

Fusion and quasifission dynamics within TDHF theory

Friday 22 November 2024 15:00 (30 minutes)

Presenter: LU GUO (University of Chinese Academy of Sciences, China)

Session Classification: Properties of SHE

Contribution ID: 113

Type: **not specified**

Level density parameters and fission probability along fission path

Friday 22 November 2024 15:30 (30 minutes)

Presenter: NIKOLAI ANTONENKO (JINR)

Session Classification: Properties of SHE

Contribution ID: 114

Type: **not specified**

Heavy nuclei from massive transfer

Friday 22 November 2024 16:30 (30 minutes)

Presenter: IGOR VOROBIEV (JINR)

Session Classification: Nuclear reactions with heavy ions

Contribution ID: 115

Type: **not specified**

Transfermium nuclei expected from U + U interactions

Friday 22 November 2024 17:00 (30 minutes)

Presenter: VYACHESLAV SAIKO (JINR)

Session Classification: Nuclear reactions with heavy ions

Contribution ID: 116

Type: **not specified**

Decay spectroscopy studies of ^{253}Rf and ^{254}No with GABRIELA@SHELS

Saturday 23 November 2024 09:00 (30 minutes)

Presenter: KARL HAUSCHILD (CSNS, IN2P3/CNRS and Université Paris Sud, France)

Session Classification: Properties of SHE

Contribution ID: 117

Type: **not specified**

Synthesis and Decay Properties of Ds Isotopes ($Z=110$) in ^{40}Ar and ^{48}Ca Induced Reactions

Saturday 23 November 2024 09:30 (30 minutes)

Presenter: MAKSIM SHUMEYKO (JINR)

Session Classification: Properties of SHE

Contribution ID: **118**

Type: **not specified**

K-isomers in heavy and superheavy nuclei

Saturday 23 November 2024 10:00 (30 minutes)

Presenter: NIKOLAY MINKOV (Institute of Nuclear Research and Nuclear Energy, BAS, Bulgaria)

Session Classification: Properties of SHE