

PRELIMINARY PROGRAM

SHE 2017

No.	Start time	Name Title	Affiliation	Time
-----	------------	---------------	-------------	------

The time allocated for a talk includes discussion.

SUNDAY, 10.09

18:00 Dinner

SUNDAY EVENING

Chairman: Krzysztof Pomorski

Opening

1	19:00	Michał Warda Michał Kowal Sergey Dmitriev <i>Welcome address</i>	UMCS, Lublin NCBJ, Warsaw JINR, Dubna	25
---	-------	--	---	----

2	19:25	Krzysztof Rykaczewski <i>Program of the Symposium</i>	ORNL, Oak Ridge	5
---	-------	---	-----------------	---

3	19:30	Yuri Oganessian Mikhail Itkis Sigurd Hofmann <i>Walter Greiner Memorial</i>	JINR, Dubna JINR, Dubna GSI, Darmstadt	30
---	-------	---	--	----

Future SHE facilities

4	20:00	Sergey Dmitriev <i>Dubna super heavy elements factory</i>	JINR, Dubna	20
---	-------	---	-------------	----

5	20:20	Hideto En'yo <i>RIKEN RI Beam Factory and future SHE experiment</i>	RIKEN Nishina Center	20
---	-------	---	----------------------	----

6	20:40	Marek Lewitowicz <i>The GANIL-SPIRAL2 facility</i>	GANIL, Caen	20
---	-------	--	-------------	----

MONDAY, 11.09

8:00 Breakfast

MONDAY MORNING 1

Chairman: tbd

Future of the SHE research

- | | | | | |
|--|-------|----------------------------|---------------------------|----|
| 1 | 9:00 | Witold Nazarewicz | Michigan State University | 30 |
| <i>Superheavy Element Research: Perspectives</i> | | | | |
| 2 | 9:30 | Yuri Oganessian | JINR, Dubna | 30 |
| <i>Experimental studies of SHE</i> | | | | |
| 3 | 10:00 | Peter Schwerdtfeger | NZIAS, Auckland | 30 |
| <i>Toward an accurate electronic structure theory of superheavy elements</i> | | | | |

10:30 Coffee break

MONDAY MORNING 2

Chairman: tbd

Status reports and new results

- | | | | | |
|---|-------|--------------------------|-----------------|----|
| 1 | 10:45 | James Roberto | ORNL, Oak Ridge | 25 |
| <i>Actinide targets for superheavy elements research and discovery</i> | | | | |
| 2 | 11:10 | Vladimir Utyonkov | JINR, Dubna | 25 |
| <i>Study of neutron-deficient nuclei in the $^{239,240}\text{Pu} + ^{48}\text{Ca}$ reactions</i> | | | | |
| 3 | 11:35 | Kouji Morimoto | RIKEN, Tokyo | 25 |
| <i>Status and future plan of SHE experiment at RIKEN</i> | | | | |
| 4 | 12:00 | Michael Block | GSI/HIM/JGU | 25 |
| <i>SHE research at GSI Darmstadt</i> | | | | |
| 5 | 12:25 | Sigurd Hofmann | GSI, Darmstadt | 25 |
| <i>Search for element 120</i> | | | | |

13:00	Lunch
	MONDAY AFTERNOON 1
15:00	<i>Parallel sessions 1A, 1B, 1C</i>
16:15	Coffee break
	MONDAY AFTERNOON 2
16:30	<i>Parallel sessions 2A, 2B, 2C</i>
18:30	Dinner

TUESDAY, 12.09

8:00 Breakfast

TUESDAY MORNING 1

9:00 *Parallel sessions 3A, 3B*

10:30 Coffee break

TUESDAY MORNING 2

Chairman: tbd

Fission mechanism

- | | | | | |
|---|-------|--|-----------------|----|
| 1 | 10:50 | Katsuhisa Nishio | JAEA, Tokai | 25 |
| | | <i>Fission studies using multi-nucleon transfer reactions</i> | | |
| 2 | 11:15 | Janusz Skalski | NCBJ, Warsaw | 25 |
| | | <i>Fission of SHN & its hindrance: odd particle systems and isomers</i> | | |
| 3 | 11:40 | Nicolae Carjan | JINR, Dubna | 25 |
| | | <i>Pre-scission model predictions of fission fragment mass distribution for very heavy and superheavy elements</i> | | |
| 4 | 12:05 | Nicolas Schunck | LLNL, Livermore | 25 |
| | | <i>Microscopic description of nuclear fission: application to the stability of superheavy elements</i> | | |
| 5 | 12:30 | Michał Warda | UMCS, Lublin | 25 |
| | | <i>Cluster radioactivity in super heavy nuclei</i> | | |

13:00 Lunch

TUESDAY AFTERNOON 1			
Chairman: tbd			
<i>SHE synthesis</i>			
1	15:00	Sait Umar <i>Dynamics of heavy-systems using TDDFT</i>	Vanderbilt University 25
2	15:25	Krystyna Siwek-Wilczyńska <i>Predictions of the production cross sections for new superheavy nuclei in the range of atomic numbers 113 - 120</i>	University of Warsaw 25
3	15:50	Gurgen Adamian <i>Ways to produce new isotopes of superheavy nuclei in neutron and charged particle evaporation channels</i>	JINR, Dubna 25
4	16:15	Alexander Karpov <i>Production of neutron-rich nuclides in multinucleon transfer reactions</i>	JINR, Dubna 25

16:40 Coffee break

TUESDAY AFTERNOON 2			
Chairman: tbd			
<i>Structure of ground and excited states in SHE</i>			
1	16:55	Michał Kowal <i>Structure of ground and excited states in SHE from deformed Woods-Saxon.</i>	NCBJ, Warsaw 25
2	17:20	Anatoli Afanasjev <i>Superheavy nuclei in covariant density functional theory</i>	Mississippi State University 25
3	17:45	Rolf-Dietmar Herzberg <i>Isomerism in the heaviest nuclei</i>	University of Liverpool 25
4	18:10	Alexander Eremin <i>Spectroscopy of the isotopes of transfermium elements in Dubna: present status and perspectives</i>	JINR, Dubna 25
5	18:35	Guy Savard <i>Single ion manipulation techniques for SHE studies</i>	Argonne National Laboratory 25
6	19:00	Galina Knyazheva <i>Fission and quasifission of composite systems with Z=114: transition from heavy-ion reactions involving Ca to Ti</i>	JINR, Dubna 25

19:30 Dinner

WEDNESDAY, 13.09

8:00 Breakfast

WEDNESDAY MORNING 1

Chairman: tbd

Atomic structure of SHE

- | | | | | |
|--|-------|--------------------------|----------------|----|
| 1 | 9:00 | Heinz Gäggeler | PSI, Villigen | 25 |
| <i>Half a century gas phase chemistry with SHE - past, present, future</i> | | | | |
| 4 | 9:25 | Yuichiro Nagame | JAEA, Tokai | 25 |
| <i>First ionization potentials of the heaviest elements</i> | | | | |
| 3 | 9:50 | Robert Eichler | PSI, Villigen | 25 |
| <i>Prospects of gas phase chemistry with SHE</i> | | | | |
| 4 | 10:15 | Kenneth Gregorich | LBLN, Berkeley | 25 |
| <i>Preparations for heavy element gas-phase ion chemistry</i> | | | | |

10:40 Coffee break

WEDNESDAY MORNING 2

Chairman: tbd

Theory

- | | | | | |
|---|-------|---------------------------|---------------------------------|----|
| 1 | 10:55 | Piotr Magierski | Warsaw University of Technology | 25 |
| <i>What we can learn on superheavy nuclei from time dependent density functional theory</i> | | | | |
| 2 | 11:20 | Peter Moller | P. Moller Scientific Computing | 25 |
| <i>Reliability of FR(L)DM model predictions of SHE stability and optimum fusion reactions</i> | | | | |
| 3 | 11:45 | Gurgen Ter-Akopyan | JINR, Dubna | 25 |
| <i>About the possibility to acquire data on fission characteristics of neutron-rich superheavy nuclei produced in quasi-elastic transfer reactions.</i> | | | | |
| 4 | 12:10 | Krzysztof Pomorski | UMCS, Lublin | 25 |
| <i>Potential Energy Surfaces of Heavy and Super Heavy Nuclei in the 4D</i> | | | | |

13:00 Lunch

WEDNESDAY AFTERNOON 1			
Chairman: tbd			
<i>Reports of prallel sessions</i>			
1	15:00	Fritz Peter Heßberger <i>1A: New approaches to production and studies of SHE</i>	15
		GSI, Darmstadt	
2	15:15	Michael Block <i>1B: Beams and targets</i>	15
		GSI/HIM/JGU	
3	15:30	Jacklyn Gates <i>1C: Detectors</i>	15
		LBNL, Berkeley	
4	15:45	Luis Robledo <i>2A: Theoretical description of SHE</i>	15
		UAM, Madrid	
5	16:00	Gottfried Münzenberg <i>2B: Acceleration and separation</i>	15
		GSI, Darmstadt	
6	16:15	Dieter Ackermann <i>2C: Spectroscopy of SHE</i>	15
		GANIL, Caen	
7	16:30	David Hinde <i>3A: Fusion of SHE</i>	15
		Australian National University	
8	16:45	Heinz Gäggeler <i>3B: Atomic structure and chemistry</i>	15
		PSI, Villigen	

17:00 Coffee break

WEDNESDAY AFTERNOON 2			
Chairman: tbd			
<i>Symposium summary</i>			
1	17:15	Witold Nazarewicz Yuri Oganessian <i>Round table discussion</i>	1:15
		Michigan State University JINR, Dubna	

19:00 Conference Dinner
Flerov Awards for Witek Nazarewicz, Vladimir Utyonkov and James Roberto

THURSDAY, 14.09

7:00 Breakfast

8:00 Bus #1 departure to Warsaw

9:00 Bus #2 departure to Warsaw