

13TH INTERNATIONAL CONFERENCE ON  
RELATIVISTIC EFFECTS IN HEAVY-  
ELEMENT CHEMISTRY AND PHYSICS

REHE



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22

## PROGRAM

From 26 September to 30 September 2022  
BV Grand Hotel Assisi  
Assisi, Italy

**13<sup>th</sup> International Conference on Relativistic Effects in Heavy-Element Chemistry and Physics**  
**From 26 September to 30 September 2022**

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**Day 1 - Monday, September 26<sup>th</sup>, 2022**
**14:30 – 18:00**      **Registration**
**18:00 – 18:30**      **Opening Ceremony - incl. Historical talk "The road to Assisi" (Pekka Pyykkö)**
**SESSION 01**
**Session Chair: Pekka Pyykkö**
**Extended lecture**
**18:30 – 19:00**

EL 1

**Victor V. Flambaum**
*"Relativistic and QED effects in spectra and isotope shifts in superheavy atoms"*

 School of Physics, University of New South Wales, Sydney 2052, Australia.  
 Helmholtz Institute Mainz, Johannes Gutenberg University, 55099 Mainz, Germany.

**Invited Talk**
**19:00 – 19:30**

IT 1.1

**W. H. Eugen Schwarz**
*"REHE - Revolution of the Periodic Table at the Bottom"*

 Theoretical Chemistry Center, Tsinghua University, Beijing 100084 China.  
 Physical and Theoretical Chemistry Laboratory, Faculty of Science and Engineering, University of Siegen, Siegen, 57068 Germany.

**19:30 – 21:00**
**Dinner**

**13<sup>th</sup> International Conference on Relativistic Effects in Heavy-Element Chemistry and Physics**  
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**Day 2 - Tuesday, September 27<sup>th</sup>, 2022**

**SESSION 02**

**Session Chair: Valeria Pershina**

**Extended lecture**

**09:00 – 09:30**      EL 2      **Yuri T. Oganessian**  
*"Mass Limits of Nuclei and Elements"*  
 Flerov Laboratory of Nuclear Reactions, Joint Institute for Nuclear Research (JINR), Dubna, Moscow region, Russia.

**Invited Talks**

**09:30 – 10:00**      IT 2.1      **Patrick Steinegger**  
*"Prospects in experimental superheavy element chemistry"*  
 Laboratory of Radiochemistry, Nuclear Energy and Safety Division, Paul Scherrer Institute, Forschungsstrasse 111, Villigen PSI, CH-5232, Switzerland.  
 Laboratory of Inorganic Chemistry, Department of Chemistry and Applied Biosciences, ETH Zürich, Zürich, CH-8093, Switzerland.

**10:00 – 10:30**      IT 2.2      **Jaideep Taggart Singh**  
*"Towards a Search for Time-Reversal Violation Using Pear-Shaped Nuclei Implanted in Cryogenic Solids"*  
 Facility for Rare Isotope Beams, Michigan State University, East Lansing, 48823, United States.

**10:30 – 11:00**      **Coffee Break**

**SESSION 03**

**Session Chair: Peter Schwerdtfeger**

**Invited Talks**

**11:00 – 11:30**      IT 2.3      **Mustapha Laatiaoui**  
*"Optical Spectroscopy of the Heaviest Elements"*  
 Department of Chemistry, Johannes Gutenberg University, Fritz-Strassmann Weg 2, 55128 Mainz, Germany.  
 Helmholtz-Institut Mainz, Staudingerweg 18, 55128 Mainz, Germany.

**11:30 – 12:00**      IT 2.4      **Anastasia Borschevsky**  
*"High accuracy calculations for heavy elements in support of experimental research"*  
 The Van Swinderen Institute for Particle Physics and Gravity, University of Groningen, Groningen, 9747AG, The Netherlands.

**12:00 – 12:30**      IT 2.5      **Valeria Pershina**  
*"Predictions of Properties and Experimental Behaviour of Superheavy Elements"*  
 GSI Helmholtzzentrum für Schwerionenforschung GmbH, 64291 Darmstadt, Germany.

**12:30 – 13:30**      **Lunch**

**13:30 – 14:30**      **Free - Time**

**SESSION 04**

**Session Chair: Robert Berger**

**Invited Talks**

**14:30 – 15:00**      IT 2.6      **Peter Schwerdtfeger**  
*"Is flerovium behaving like a noble-gas element?"*  
 Centre for Theoretical Chemistry and Physics, The New Zealand Institute for Advanced Study, Massey University Auckland, Private Bag 102904, 0745 Auckland, New Zealand.

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15:00 – 15:30	IT 2.7	<b><u>Ephraim Eliav</u></b> “Benchmark electronic structures calculations at the edge of Periodic Table” School of Chemistry, Tel Aviv University, 69978 Tel Aviv, Israel.
15:30 – 16:00	IT 2.8	<b><u>Vladimir Shabaev</u></b> “QED with heavy ions: on the way to supercritical fields” Department of Physics, St. Petersburg State University, Oulianovskaya Street 1, Petrodvorets, 198504 St. Petersburg, Russia.
16:00 – 16:30	IT 2.9	<b><u>Paul Indelicato</u></b> “Relativistic effects, QED corrections and correlation in heavy and super-heavy elements total binding energies” Kastler Brossel Laboratory, Sorbonne University, CNRS, ENS-PSL Research University, Collège de France, 4 Place Jussieu, 75005 Paris, France.
16:30 – 17:00	Coffee Break	
SESSION 05		
Session Chair: Anastasia Borschevsky		
Invited Talks		
17:00 – 17:30	IT 2.10	<b><u>Trond Saue</u></b> “Does chemistry need more physics?” Laboratoire de Chimie et Physique Quantique, UMR 5626 CNRS — Université Toulouse III-Paul Sabatier, 118 Route de Narbonne, F-31062 Toulouse, France.
17:30 – 18:00	IT 2.11	<b><u>Edit Mátyus</u></b> “Relativistic and non-adiabatic developments for molecular quantum theory” ELTE, Eötvös Loránd University, Institute of Chemistry, Pázmány Péter sétány 1/A, Budapest H-1117, Hungary.
18:00 – 18:30	IT 2.12	<b><u>Krzysztof Pachucki</u></b> “QED theory of the nuclear magnetic shielding” Faculty of Physics, University of Warsaw, Pasteura 5, 02-093 Warsaw, Poland.
18:30 – 19:00	IT 2.13	<b><u>Gustavo A. Aucar</u></b> “Studying relativistic and QED effects on response properties with polarization propagators. Its application to NMR spectroscopic parameters” Natural and Exact Science Faculty, Northeastern University of Argentina, Av. Libertad 5460, W3404AAS Corrientes, Argentina. Institute for Modeling and Innovative Technology, IMIT (CONICET-UNNE), Av. Libertad 5460, W3404AAS Corrientes, Argentina.
19:00 – 19:30	IT 2.14	<b><u>Robert Berger</u></b> “Radium monofluoride and the violation of fundamental symmetries” Fachbereich Chemie, Philipps-University Marburg, Hans-Meerwein-Straße 4, D-35032 Marburg, Germany.
19:30 – 21:00	Dinner	
21:00 – 23:00	Poster Session – Odd numbers	

**13<sup>th</sup> International Conference on Relativistic Effects in Heavy-Element Chemistry and Physics**  
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**Day 3 - Wednesday, September 28<sup>th</sup>, 2022**

**SESSION 06**

**Session Chair: Alceo Macchioni**

**Extended lecture**

**08:45 – 09:30**

EL 3

**Stephen T. Liddle**

*"Actinide-Ligand Multiple Bonding: Marrying Experiment and Theory to Quantify Covalency"*

Department of Chemistry and Centre for Radiochemistry Research, The University of Manchester, Oxford Road, Manchester, M13 9PL, United Kingdom.

**Invited Talks**

**09:30 – 10:00**

IT 3.1

**Tonya Vitova**

*"Bonding interactions of the actinide elements probed by high resolution X-ray spectroscopy"*

Karlsruhe Institute of Technology (KIT), Institute for Nuclear Waste Disposal (INE), P.O. Box 3640, 76021, Karlsruhe, Germany.

**10:00 – 10:30**

IT 3.2

**Mauro Perfetti**

*"Magnetic anisotropy of heavy-elements molecular compounds: study and control"*

Department of Chemistry Ugo Schiff and INSTM Research Unit, University of Florence, Via della Lastruccia 3, 50019, Sesto Fiorentino, Italy.

**10:30 – 11:00**

**Coffee Break**

**SESSION 07**

**Session Chair: Stephen T. Liddle**

**Invited Talks**

**11:00 – 11:30**

IT 3.3

**Paola Belanzoni**

*"Intriguing features of the halogen bond revealed by spin-orbit coupling"*

Department of Chemistry, Biology and Biotechnology, University of Perugia, Italy, Via dell' Elce di Sotto, 8, Perugia, Italy.  
 CNR Institute of Chemical Science and Technologies "Giulio Natta" (CNR-SCITEC), Perugia, 06123, Italy.

**11:30 – 12:00**

IT 3.4

**Minori Abe**

*"Theoretical calculation of isotope fractionation in biotic uranium reduction"*

Department of Chemistry, Graduate School of Science, Hiroshima University, 1-3-2, Kagamiyama, Higashi-Hiroshima City, Hiroshima 739-8511, Japan.  
 Department of Chemistry, Graduate School of Science, Tokyo Metropolitan University, 1-1 Minami-Osawa, Hachioji-shi, Tokyo 192-0397, Japan.

**12:00 – 12:30**

IT 3.5

**Joel Creutzberg**

*"Investigating relativistic effects for light-activated diazido Platinum complexes in aqueous environments"*

Division of Theoretical Chemistry, Lund University, SE-223 62 Lund, Sweden.

**13<sup>th</sup> International Conference on Relativistic Effects in Heavy-Element Chemistry and Physics**  
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<b>12:30 – 13:30</b>	<b>Lunch</b>	
<b>SESSION 08</b>		
<b>Session Chair: Minori Abe</b>		
<b>Invited Talks</b>		
<b>13:30 – 14:00</b>	IT 3.6	<b><u>Daniele Cesarini</u></b> <i>"The Leonardo Supercomputer at the Bologna Big Data Technopole and the CINECA's Evolution Roadmap"</i> Department of SuperComputing Applications and Innovation, CINECA, 40033 Casalecchio di Reno (BO), Italy.
<b>14:00 – 14:30</b>	IT 3.7	<b><u>Ivano Tavernelli</u></b> <i>"Quantum computing applications in quantum chemistry"</i> IBM Quantum, IBM Research Europe – Zurich, Säumerstrasse 4, CH-8803 Rüschlikon, Switzerland.
<b>14:30 – 15:00</b>	IT 3.8	<b><u>Lucas Visscher</u></b> <i>"Electron correlation challenges in relativistic quantum chemistry"</i> Division of Theoretical Chemistry, Faculty of Sciences, Vrije Universiteit Amsterdam, De Boelelaan 1083, 1081 HV, Amsterdam, The Netherlands.
<b>15:00 – 19:30</b>	<b>Trip to Assisi – Bus for Assisi departure at 15:15</b>	
<b>19:30 – 21:00</b>	<b>Dinner</b>	
<b>21:00 – 23:00</b>	<b>Poster Session – Even numbers</b>	



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**Day 4 - Thursday, September 29<sup>th</sup>, 2022**

**SESSION 09**

**Session Chair: Kenneth George Dyll**

**Extended lecture**

**08:45 – 09:30**      EL 4      **Christoph Helmut Keitel**  
*"Extreme field calculations for Penning ion traps and EBITs and corresponding strong laser field scenarios"*  
 Max Planck Institute for Nuclear Physics (MPIK), Saupfercheckweg 1,  
 D-69117 Heidelberg, Germany.

**Invited Talks**

**09:30 – 10:00**      IT 4.1      **Sang-Kil Son**  
*"Relativistic effects in x-ray multiphoton ionization dynamics"*  
 Center for Free-Electron Laser Science CFEL, Deutsches Elektronen-Synchrotron DESY, Hamburg, 22607, Germany.

**10:00 – 10:30**      IT 4.2      **Michal Repisky**  
*"Modern X-ray spectroscopies with atomic mean-field X2C Hamiltonians"*  
 Hylleraas Centre for Quantum Molecular Sciences, Department of Chemistry, University of Tromsø – UiT The Arctic University of Norway, N-9037 Tromsø, Norway.

**10:30 – 11:00**      **Coffee Break**

**SESSION 10**

**Session Chair: Xiaosong Li**

**Invited Talks**

**11:00 – 11:30**      IT 4.3      **Harry M. Quiney**  
*"Calculation of Breit and QED effects using Gaussian spinor basis functions"*  
 School of Physics, The University of Melbourne, Victoria 3010, Australia.  
 Mathematical Institute, University of Oxford, Oxford OX2 6GG, United Kingdom.

**11:30 – 12:00**      IT 4.4      **Kenneth George Dyll**  
*"Basis Sets for Relativistic Atomic and Molecular Calculations"*  
 Dirac Solutions, 10527 NW Lost Park Drive, Portland, Oregon 97229, United States.

**12:00 – 12:30**      IT 4.5      **Maen Salman**  
*"Vacuum polarization in the finite basis problem"*  
 Laboratoire de Chimie et Physique Quantique, UMR 5626 CNRS —  
 Université Toulouse III-Paul Sabatier, 118 route de Narbonne, F-31062 Toulouse, France.

**12:30 – 13:30**      **Lunch**

**13:30 – 14:30**      **Free - Time**

**13<sup>th</sup> International Conference on Relativistic Effects in Heavy-Element Chemistry and Physics**  
**From 26 September to 30 September 2022**

**SESSION 11**

Session Chair: Filippo De Angelis

**Invited Talks**

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|----------------------|--------|---|
| <b>14:30 – 15:00</b> | IT 4.6 | <b><u>Alessandro Erba</u></b><br><i>"Spin Current Density Functional Theory (SCDFT) for Solids Made Practical: The Interplay of Spin-Orbit Coupling and Fock Exchange"</i><br>Department of Chemistry, University of Torino, via Giuria 5, 10125 Torino, Italy.   |
| <b>15:00 – 15:30</b> | IT 4.7 | <b><u>Marius Kadek</u></b><br><i>"Efficient all-electron four-component Kohn--Sham theory for relativistic band structures and properties of periodic solids"</i><br>Department of Physics, Northeastern University, Boston, Massachusetts 02115, United States.<br>Hylleraas Centre for Quantum Molecular Sciences, Department of Chemistry, UiT The Arctic University of Norway, N-9037 Tromsø, Norway. |
| <b>15:30 – 16:00</b> | IT 4.8 | <b><u>Volker Blum</u></b><br><i>"Relativistic Effects in Large, Complex Systems in an All-Electron Framework Based on Numeric Atom-Centered Basis Sets"</i><br>Thomas Lord Department of Mechanical Engineering and Materials Science, Duke University, Durham, North Carolina 27708, United States.<br>Department of Chemistry, Duke University, Durham, North Carolina 27708, United States.            |
| <b>16:00 – 16:30</b> | IT 4.9 | <b><u>Silvia Picozzi</u></b><br><i>"Modelling of Spin-Orbit Coupling Effects in Ferroelectrics"</i><br>Consiglio Nazionale delle Ricerche CNR-SPIN, c/o Università degli Studi "G. D'Annunzio" di Chieti-Pescara, I-66100 Chieti, Italy.  |

<b>16:30 – 17:00</b>	<b>Coffee Break</b>
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**SESSION 12**

Session Chair: Trond Saue

**Invited Talks**

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|----------------------|---------|--|
| <b>17:00 – 17:30</b> | IT 4.10 | <b><u>André Severo Pereira Gomes</u></b><br><i>"Relativistic correlated electronic structure and the calculation of accurate ground-state, core and valence properties of heavy element species"</i><br>University of Lille, CNRS, UMR 8523 - PhLAM - Laboratory of Physics of Lasers, Atoms and Molecules, F-59000 Lille, France. |
| <b>17:30 – 18:00</b> | IT 4.11 | <b><u>Lan Cheng</u></b><br><i>"Analytic gradient techniques for spinor-based relativistic coupled-cluster theory"</i><br>Department of Chemistry, The Johns Hopkins University, Baltimore, Maryland 21218, United States.  |
| <b>18:00 – 18:30</b> | IT 4.12 | <b><u>Xiaosong Li</u></b><br><i>"Four-Component Relativistic Multireference Methods: Find the Balance between Relativistic Effects and Electron Correlation"</i><br>Department of Chemistry, University of Washington, Seattle, Washington 98195, United States.   |

<b>18:30 – 19:30</b>	<b>Discussion next REHE</b>
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<b>19:30 – 20:00</b>	<b>Free - Time</b>
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<b>20:00 – 23:30</b>	<b>Social Dinner</b>
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**From 26 September to 30 September 2022**

**Day 5 - Friday, September 30<sup>th</sup>, 2022**

**SESSION 13**

**Session Chair: Lucas Visscher**

**Invited Talks**

<b>09:00 – 09:30</b>	IT 5.1	<p><b><u>Wenjian Liu</u></b>  <i>"SOiCI: Combining iCI with SOC for Fine Structures of Heavy Systems"</i>            Qingdao Institute for Theoretical and Computational Sciences, Institute of Frontier and Interdisciplinary Science, Shandong University, Qingdao, Shandong 266237, People's Republic of China.</p>
<b>09:30 – 10:00</b>	IT 5.2	<p><b><u>Lukas Konecny</u></b>  <i>"Linear Response in Relativistic Quantum-Electrodynamical Time-Dependent Density Functional Theory"</i>            Hylleraas Centre for Quantum Molecular Sciences, Department of Chemistry, University of Tromsø – UiT The Arctic University of Norway, N-9037 Tromsø, Norway.</p>
<b>10:00 – 10:30</b>	IT 5.3	<p><b><u>Aleksandra A. Kyuberis</u></b>  <i>"Theoretical study of properties of radioactive molecules"</i>            Van Swinderen Institute for Particle Physics and Gravity (VSI), University of Groningen, Nijenborgh 4, 9747AG Groningen, The Netherlands.</p>
<b>10:30 – 11:00</b>	IT 5.4	<p><b><u>Ilya I. Tupitsyn</u></b>  <i>"Specific features of electronic structure and chemical properties of super-heavy elements of the 7th and 8th periods"</i>            Department of Physics, St. Petersburg State University, Ulianovskaya 1, Petrodvorets, 198504 St. Petersburg, Russia.</p>
<b>11:00 – 11:15</b>	<b>Concluding Remarks</b>	
<b>11:15 – 12:00</b>	<b>Light lunch</b>	

**13th International Conference on Relativistic Effects in Heavy-Element Chemistry and Physics**  
**From 26 September to 30 September 2022**

**Poster session - Tuesday 27<sup>th</sup> September and Wednesday 28<sup>th</sup> September**

Poster session 1 – Tuesday 27<sup>th</sup> September – Odd numbers

Poster session 2 – Wednesday 28<sup>th</sup> September – Even numbers

N°	NAME, ORGANIZATION	TITLE
1	Carsten Zülch Philipps-University Marburg	Molecular Ions for Fundamental Physics: A Systematic Investigation Throughout the Periodic Table of Elements
2	Christian Tantardini The Arctic University of Norway	Multiwavelet implementation of the Dirac Equation
3	Dávid Ferenc Eötvös Loránd University	Towards an all-order explicitly correlated approach for precision spectroscopy
4	Diego Sorbelli University of Perugia	On the nature of the aurophilic interaction: a quest for covalent and spin-orbit coupling contributions
5	E. Eduardus University of Groningen	Towards Detection of Molecular Parity Violation in Helical Ferrocene, Ruthenocene, and Osmocene
6	Ignacio Agustín Aucar Northeastern National University	Parity-violating nuclear spin-rotation tensors in tetrahedral molecules
7	Jacek Rzadkiewicz NCBJ	Ionization energies of W <sup>2+</sup> through W <sup>27+</sup>
8	Jinxia Hu Sorbonne University - CNRS	The total atomic energies of the ground state configurations of many-electron isoelectronic series
9	Johann Valentin Pototschnig CNRS – University Toulouse III	Chemical insight from an improved Dailey–Townes model of nuclear quadrupole coupling
10	Juan José Aucar Northeastern National University	Relativistic corrections to the electric field gradient given by linear response elimination of the small component (LRESC) formalism
11	Karol Koziol NCBJ	Low-lying energy levels of Th <sup>39+</sup>
12	Katarzyna Jakubowska University of Warsaw	Calculation of Vibrational Frequencies with Four-Component Relativistic DFT Method
13	Konstantin Gaul Philipps-University Marburg	Highly-charged actinide molecules: A versatile laboratory to study fundamental physics
14	Lorenzo Baldinelli University of Perugia	Computational Modelling of Electrocatalytic Processes on Coordination Polymers
15	Luca Gregori University of Perugia	Host-Dopant Dative Bonding Facilitates Molecular Doping in Tin-Lead Perovskites
16	Małgorzata Olejniczak University of Warsaw	Topological Data Analysis in quantum chemistry - what can new data abstractions tell us about the role of relativistic effects on bonding and reactivity?

**13th International Conference on Relativistic Effects in Heavy-Element Chemistry and Physics**  
**From 26 September to 30 September 2022**

<b>17</b>	Mariano T. Colombo Jofré Northeastern National University	Relativistic and QED corrections to one-bond indirect nuclear spin-spin couplings in $X_2^{2+}$ and $X_3^{2+}$ ions ( $X = \text{Zn, Cd, Hg}$ )
<b>18</b>	Marten Luit Reitsma University of Groningen	Relativistic Fock-space coupled cluster calculations for extracting nuclear moments and charge radii from spectroscopy
<b>19</b>	Martin van Horn CNRS – University Toulouse III	The validity of the electric dipole approximation in X-ray spectroscopy
<b>20</b>	Matteo De Santis CNRS – University of Lille	Environmental Effects with Frozen Density Embedding in the Real Time Time Dependent Dirac Kohn Sham framework
<b>21</b>	Michiko Atsumi University of Oslo	Compared non-relativistic effects and relativistic effects on $M_2$ ( $M = \text{Nh, Fl, Mc, Lv, Ts, and Og}$ )
<b>22</b>	Odile Smits Massey University	The Dirac equation in strong Coulomb fields
<b>23</b>	Péter Jeszenszki Eötvös Loránd University	Variational Dirac–Coulomb approach with explicitly correlated basis functions
<b>24</b>	Raphaël Crosa-Rossa University of Groningen	Calculations of the electron affinity of polonium at the CCSD(T) level
<b>25</b>	Torsha Moitra The Arctic University of Norway	Developing theoretical beamlines for ultrafast spectroscopy
<b>26</b>	Xiang Yuan CNRS – University of Lille	Assessing MP2 frozen natural orbitals for relativistic electronic structure
<b>27</b>	Yangyang Guo University of Groningen	High accuracy calculations of electron affinity of heavy and superheavy elements
<b>28</b>	Yuly Andrea Chamorro Mena University of Groningen	Relativistic electronic structure calculations for measurements of symmetry violations: A matter of precision

DAY 1 SEPTEMBER 26 MONDAY	DAY 2 SEPTEMBER 27 TUESDAY	DAY 3 SEPTEMBER 28 WEDNESDAY	DAY 4 SEPTEMBER 29 THURSDAY	DAY 5 SEPTEMBER 30 FRIDAY	
		08:45 - 09:30 <b>3° EXTENDED LECTURE</b> Stephen T. Liddle	08:45 - 09:30 <b>4° EXTENDED TALK</b> Christoph Helmut Keitel	09:00 - 09:30 <b>36° INVITED TALK</b> Wenjian Liu	
	09:00 - 09:30 <b>2° EXTENDED LECTURE</b> Yuri T. Oganessian				
	09:30 - 10:00 <b>2° INVITED TALK</b> Patrick Steinegger	09:30 - 10:00 <b>16° INVITED TALK</b> Tonya Vitova	09:30 - 10:00 <b>24° INVITED TALK</b> Sang-Kil Son	09:30 - 10:00 <b>37° INVITED TALK</b> Lukas Konecny	
	10:00 - 10:30 <b>3° INVITED TALK</b> Jaideep Taggart Singh	10:00 - 10:30 <b>17° INVITED TALK</b> Mauro Perfetti	10:00 - 10:30 <b>25° INVITED TALK</b> Michal Repisky	10:00 - 10:30 <b>38° INVITED TALK</b> Aleksandra A. Kyuberis	
	10:30 - 11:00 <b>COFFEE BREAK</b>	10:30 - 11:00 <b>COFFEE BREAK</b>	10:30 - 11:00 <b>COFFEE BREAK</b>	10:30 - 11:00 <b>39° INVITED TALK</b> Ilya I. Tupitsyn	
	11:00 - 11:30 <b>4° INVITED TALK</b> Mustapha Laatiaoui	11:00 - 11:30 <b>18° INVITED TALK</b> Paola Belanzoni	11:00 - 11:30 <b>26° INVITED TALK</b> Harry M. Quiney	11:00 - 11:15 <b>CONCLUDING REMARKS</b>	
	11:30 - 12:00 <b>5° INVITED TALK</b> Anastasia Borschevsky	11:30 - 12:00 <b>19° INVITED TALK</b> Minori Abe	11:30 - 12:00 <b>27° INVITED TALK</b> Kenneth George Dyall	11:15 - 12:00 <b>LIGHT LUNCH</b>	
	12:00 - 12:30 <b>6° INVITED TALK</b> Valeria Pershina	12:00 - 12:30 <b>20° INVITED TALK</b> Joel Creutzberg	12:00 - 12:30 <b>28° INVITED TALK</b> Maen Salman		
	12:30 - 13:30 <b>LUNCH BREAK</b>	12:30 - 13:30 <b>LUNCH BREAK</b>	12:30 - 13:30 <b>LUNCH BREAK</b>		
	14:30 - 18:00  <b>REGISTRATION</b>		13:30 - 14:00 <b>21° INVITED TALK</b> Daniele Cesarini	13:30 - 14:30 <b>FREE TIME</b>	
			14:00 - 14:30 <b>22° INVITED TALK</b> Ivano Tavernelli		
14:30 - 15:00 <b>7° INVITED TALK</b> Peter Schwerdtfeger		14:30 - 15:00 <b>23° INVITED TALK</b> Lucas Visscher	14:30 - 15:00 <b>29° INVITED TALK</b> Alessandro Erba		
15:00 - 15:30 <b>8° INVITED TALK</b> Ephraim Eliav		15:15 - 19:30 <b>EXCURSION TO ASSISI</b> (Bus for Assisi departure at 15:15)	15:00 - 15:30 <b>30° INVITED TALK</b> Marius Kadek		
15:30 - 16:00 <b>9° INVITED TALK</b> Vladimir Shabaev			15:30 - 16:00 <b>31° INVITED TALK</b> Volker Blum		
16:00 - 16:30 <b>10° INVITED TALK</b> Paul Indelicato			16:00 - 16:30 <b>32° INVITED TALK</b> Silvia Picozzi		
16:30 - 17:00 <b>COFFEE BREAK</b>			16:30 - 17:00 <b>COFFEE BREAK</b>		
17:00 - 17:30 <b>11° INVITED TALK</b> Trond Saue			17:00 - 17:30 <b>33° INVITED TALK</b> André Severo Pereira Gomes		
17:30 - 18:00 <b>12° INVITED TALK</b> Edit Mátyus			17:30 - 18:00 <b>34° INVITED TALK</b> Lan Cheng		
18:00 - 18:30 <b>13° INVITED TALK</b> Krzysztof Pachucki			18:00 - 18:30 <b>35° INVITED TALK</b> Xiaosong Li		
18:30 - 19:00 <b>1° EXTENDED LECTURE</b> Victor V. Flambaum			18:30 - 19:00 <b>14° INVITED TALK</b> Gustavo A. Aucar	18:30 - 19:30 <b>DISCUSSION NEXT REHE</b>	
19:00 - 19:30 <b>1° INVITED TALK</b> W. H. Eugen Schwarz	19:00 - 19:30 <b>15° INVITED TALK</b> Robert Berger				
19:30 - 21:00 <b>DINNER</b>	19:30 - 21:00 <b>DINNER</b>	19:30 - 21:00 <b>DINNER</b>	19:30 - 20:00 <b>FREE TIME</b>		
			20:00 - 23:30 <b>SOCIAL DINNER</b>		
	21:00 - 23:00 <b>POSTER SESSION</b>  Odd numbers	21:00 - 23:00 <b>POSTER SESSION</b>  Even numbers			