



JdA2026

55^{èmes} Journées des Actinides

April 14-17, 2026
Hotel Růže, Český Krumlov
Czech Republic

PROGRAM

[Updated 3/24/2026 9:24 AM]

Tuesday

April 14

12:00	Registration				
15:30					
15:50	Opening ceremony				
16:00	O1-1	Frédéric Jutier	SCK CEN, BE	High-Density NpO ₂ Targets enabling Pu-238 Supply for Radioisotope Power Systems	
16:20	O1-2	François Bottin	CEA DAM, FR	Ab initio study of the Ce and Pu oxide surface reactivity with respect to O ₂ and H ₂ O	
16:40	O1 - Materials	O1-3	Evgenia Chitrova	IoP ASCR, CZ	Electronic Structure Trends in Uranium Compounds with p-Block Ligands
17:00		O1-4	António Pereira Gonçalves	Instituto Superior Técnico, PT	Spark Plasma Sintering of Uranium Carbide: Phase Stability and Reactivity at High Temperature
17:20		O1-5	Lisa Gubbels	SCK CEN, BE	Microstructural Engineering of Porous Thorium Carbide Targets for ISOL@MYRRHA
17:40		O1-6	Rachel Eloirdi	JRC Karlsruhe, DE	Surface Science Laboratory Station as a Pilot for the Future: Challenges, Lessons Learned, and Enhancing EU Access through its Relocation to Prague
18:00	Welcome drinks and snacks				
20:00					

Wednesday

April 15

8:30	O2 - Supercond, quantum criticality, topology	O2-1	Eteri Svanidze	MPI CPfS, DE	Imperfections as a measure of exotic superconductivity?
8:50		O2-2	Michal Vališka	Charles Uni, CZ	Ultrasound Study of Field-Induced Superconducting Phases in UTe ₂
9:10		O2-3	Rebecca Bisset	University of St Andrews, UK	Determining the superconducting order parameter of UPt ₃ using scanning tunneling microscopy
9:30		O2-4	Sheng Ran	Washington Uni in St Louis, USA	Strongly correlated topological materials in uranium compounds
9:50		O2-5	Krzysztof Gofryk	Idaho National Laboratory, USA	Electronic correlations and topology in Kondo insulator PuB ₆
10:10	<i>Coffee break</i>				
10:40	O3 - Theory, computations, spectroscopy	O3-1	Dominik Legut	IoP ASCR, CZ	Heat and electrical transport in UC - role of electron correlations and spin-orbit coupling
11:00		O3-2	Sergii Khmelevskiy	TU Wien, AT	Interaction of multipolar order with crystal lattice in <i>f</i> -electron systems.
11:20		O3-3	Gheorghe-Lucian Pășcut	Stefan the Great Uni, RO	Electronic properties of f-electron systems: Insights from embedded Dynamical Mean Field Theory
11:40		O3-4	Bernard Amadon	CEA, FR	Thermodynamics of the isostructural transition in cerium from first principles
12:00		O3-5	Kristina Kvashnina	IRE HZDR, DE	Advances and Challenges in Actinide RIXS Spectroscopy
12:20	<i>Lunch</i>				
13:50	O4 - Spectroscopy	O4-1	Lucia Amidani	IRE HZDR, DE	Advanced X-ray spectroscopies for actinide research at the ROBL beamline
14:10		O4-2	Eleanor Lawrence-Bright	IRE HZDR, DE	Examination of α-uranium with resonant x-rays at the M4 edge
14:30		O4-3	Jindřich Koloreňč	IoP ASCR, CZ	Spectroscopic Observation of Valence Fluctuations in a Uranium Compound: The Case of UPd ₂ Cd ₂₀
14:50		O4-4	Fabrice Wilhelm	ESRF, FR	Advanced X-ray absorption spectroscopy under high pressure on uranium based compounds
15:10		O4-5	Andrea Severing	MPI CPfS, DE	Multiplets, correlation effects and covalency of U 5 <i>f</i> electrons in uranium intermetallic compounds
15:30	<i>Coffee break</i>				
16:00	O5- nuclear fuel cycle	O5-1	Gabriel Lynch-Murphy	FZ Juelich, DE	The Benefit of Cr vs. The Detriment of Al: Novel Insights into the Microstruct. and Mech. Performance of Model .. doped UO ₂ Spent NF Materials
16:20		O5-2	Daniil Shirokiy	FZ Juelich, DE	Speciation and Chemically Modulated Release of CsI in Nd-doped High Burn-up Structured UO ₂ Model System Materials
16:40		O5-3	Lottie Harding	Bristol Uni, UK	Exploring TRISO Ternary Phases of U-C-N
17:00		O5-4	Kevin D. Stuke	FZ Juelich, DE	Aging and Oxidation Processes of UO ₂ and PuO ₂ Nanoparticle Materials Under Ambient Conditions Relevant to Interim Storage of Spent Nuclear Fuel
17:20		O5-5	Egor Iwaschko	FZ Juelich, DE	Microstructural investigation of fresh and spent Pu MIMAS MOX nuclear fuel under repository relevant conditions and supporting model system investigations
17:40		O5-6	Pascal Uhlemann	FZ Juelich, DE	Insight into the structure and oxidation stability of Ln-doped UN
18:00	Posters and drinks				
20:00	List of posters at the end of the program on page 5.				

Thursday**April 16**

8:30	O6 - Chemistry	O6-1	Karsten Meyer	FAU Erlangen-Nürnberg, DE	Photocrystallographic formation of an authenticated cis-dioxo uranium complex
8:50		O6-2	Vladimir Sladkov	IJCLab/CNRS, Orsay, FR	Complexation of Tb(III) with hydroxamic acids in acidic aqueous solutions
9:10		O6-3	Evie Howard	Manchester Uni, UK	Incorporation and release of An(III) from nanoparticulate UO ₂ under aqueous, ambient conditions
9:30		O6-4	Md Bin Yeamin	HZDR, DE	Structure and Bonding in Quinoline-Actinide complexes as a Probe for Actinide Decorporation
9:50		O6-5	Ilja Popovs	Tennessee Uni, USA	Lanthanide Contraction and Fundamental Coordination Chemistry of Lanthanides and Actinides
10:10	<i>Coffee break</i>				
10:40	O7 - Magnetism	O7-1	Margarida Henriques	IoP ASCR, CZ	Complex magnetic modulations in Ho systems
11:00		O7-2	Rüdiger Klingeler	Heidelberg Uni, DE	Uniaxial pressure dependencies of the skyrmion lattice phases and the phase diagrams in centrosymmetric Gd ₂ PdSi ₃ and GdRu ₂ Si ₂
11:20		O7-3	Dariusz Kaczorowski	INTiBS PAS, PL	Magnetic properties of UP ₂ single crystals
11:40		O7-4	Gertrud Zwicknagl	TU Braunschweig, DE	Cooperative phenomena in locally non-centrosymmetric heavy-fermion systems
12:00		O7-5	Jeremy Sourd	HLD HZDR, DE	Field-induced transitions in the quantum critical ferromagnet YbNi ₄ P ₂
12:20	<i>Lunch</i>				
13:50	Guided tour – Český Krumlov				
15:40	<i>Coffee break</i>				
16:00	O8 - New Materials	O8-1	Jean-Christophe Griveau	JRC Karlsruhe, DE	Low Temperature Properties of An-Pt systems (An=Th, U, Np and Pu)
16:20		O8-2	Ladislav Havela	Charles Uni, CZ	5f delocalization and suppression of the CDW state in UPt ₂ Si ₂ by Ir substitution
16:40		O8-3	William Thomas	Bristol Uni, UK	Synthesis and crystallographic properties of the uranium hydride allotropes - A high-pressure study
17:00		O8-4	Yuri Grin	MPI CPfS, DE	Thorium-Based Iron Arsenide with Fe-Fe Bonding
17:20		O8-5	Utpal Dutta	IoP ASCR, CZ	Anisotropic electrical transport and pressure-tuned quantum critical behavior in YbV ₆ Sn ₆
17:40	IAC Meeting				
19:00	Conference dinner and awards				
22:00					

Friday**April 17**

9:00	O9 - Hydrides, oxides, carbides, others	O9-1	Silvie Černá	Charles Uni, CZ	Physical and H-sorption properties of uranium containing high entropy alloy (NbTa) _{0.67} (MoWU) _{0.33}
9:20		O9-2	Itzhak Halevy	Ben Gurion Uni, IL	Multi-cluster Fission track from microbulk to bulk analysis
9:40		O9-3	Peter Franz Rogl	Vienna Uni, AT	Novel Results in the Systems {Th,U} - B - C
10:00	<i>Coffee break</i>				
10:30	O10 - Nuclear Fuel Cycle	O10-1	Cooper Smylie	Glasgow Uni, UK	Developing surrogates to understand structure & reactivity of the UK's special nuclear material
10:50		O10-2	Andries van Hattem	TU Delft, NL	Thermo-physical studies into BaPuO ₃ and Ba ₃ PuO ₆
11:10		O10-3	Unai Aizpurua	CEA, FR	Systematic study of the structural and thermodynamic properties of mixed Pu-Am oxides using empirical interatomic potential
11:30		O10-4	Alexander Ivanov	Tennessee Uni, USA	Probing Transient Covalency in Molten Uranium Chlorides
11:50		O10-5	Clara Robert	CEA, FR	Development of machine-learning and magneto-elastic interatomic potentials for the simulation of UO ₂
12:10	<i>Short break</i>				
12:20	Closing session and student award				
Itzhak Halevy		Ben Gurion Uni, IL		Multi-cluster Fission track from microbulk to bulk analysis	

JdA2026 – List of Posters

Code	Name	Surname	Title
P01	Jeongsoo Kang	Catholic University of South Korea, ROK	Electronic Structures of the CeTX (T=Rh, Ni; X=Sb, As) Kondo Insulators via Resonant and Angle-Resolved Photoemission Spectroscopy
P02	Tetiana Haidamak	Charles Uni, CZ	High field study of UTe ₃
P03	Liudmyla Bludova	B. Verkin ILTPE of NASU, UA	Hydrostatic pressure effect on the pseudogap in Y _{0.77} Pr _{0.23} Ba ₂ Cu ₃ O _{7-δ} single crystals
P04	Romuald Béjaud	CEA, FR	Invar effect in δ-Pu alloys
P05	Victor Porée	Uni Rennes, FR	Nature of the magnetic ground state in cerium-based pyrochlores
P06	Jaroslav Valenta	IoP ASCR, CZ	True Initial Pressure Response of Tc in UTe ₂ Compared to Ehrenfest Predictions
P07	Felix Häusler	KIT-INE, DE	Thermodynamic description of the U(VI)-Na/Mg-NO ₃ -H ₂ O systems
P08	Elio Nejim	Bristol Uni, UK	Approaches to Stabilisation of Exotic Binary Actinide Thin Films
P09	Vincent Settle	Bristol Uni, UK	Fundamental Investigation of UCN and UCO as Candidates for Next-Generation TRISO Fuel Kernels
P10	Ben McConaughy	Bristol Uni, UK	A review of the viability of thin film techniques for characterizing the effects of neutron damage in waste uranium
P11	Frederic Gendron	CEA, FR	Temperature dependence of local magnetic moment in δ-Plutonium
P12	Sonu George Alex	IoP ASCR, CZ	Electronic Structure of UGe _{2+x} Thin Films from Photoelectron Spectroscopy
P13	S. V.V. Uday Devanaboina	Charles Uni, CZ	Expanding the U ₂ T ₂ X Landscape in Uranium Intermetallics: Synthesis and Characterization
P14	Jude Ferrier	Glasgow Uni	In-situ Spectroscopic Exploration of U/Th Surrogate Materials to Understand the Surface Chemistry of Industrial Plutonium
P15	Andries van Hattem	TU Delft, NL	Thermodynamic studies into Pb-MOX interaction
P16	Rami Babayew	Nuclear Research Center Negev, IL	Aerogel-Assisted Fission Track Analysis and Automated Image Processing for Fissile Isotope Identification
P17	Jeroen Custers	Charles Uni, CZ	Magnetic Properties of the U _n RhIn _{3n+2} Compounds
P18	Junhyuk Ha	Pusan National University, ROK	Quantitative Analysis of the Sorption Behavior of Cs(I), Sr(II), and La(III) onto Size-Fractionated Bentonite
P19	Erin Hollington	Bristol Uni, UK	Investigating the Use of Thorium Within Disposal-MOX (dMOX) for Primary Inhibition of Oxidative Dissolution
P20	Evie Howard	Manchester Uni, UK	Solid-state chemistry of nanoparticulate Th - U (hydr)oxides: implications for An(IV) speciation and fate
P21	Eric Colineau	JCR Karlsruhe, DE	Enabling Actinide Research through Access to State-of-the-Art Facilities and Expertise
P22	Vladimír Sechovský	Charles Uni, CZ	Tricriticality in Uranium Antiferromagnets