

AC² User Meeting
November, 27th – 29th 2023
Garching near Munich / online

Final Agenda

(The seminar language is English)

1st Day (Monday, November 27, 2023)		
Meeting place: GRS Garching, N001		
12:00 – 12:10	Welcome	Andreas Schaffrath GRS
12:10 – 12:40	AC ² : Overview and Future Strategy	Fabian Weyermann GRS
12:40 – 13:00	New Models and Features in ATHLET 3.4.0	Philipp Schöffel GRS
13:00 – 13:20	New Working Fluids in ATHLET	Daniel Eckert GRS
13:20 – 13:50	Coffee Break	
13:50 – 14:10	The 3-d Neutron Kinetic Code FENNECS	Armin Seubert GRS
14:10 – 14:30	Application of FENNECS	Armin Seubert GRS
14:30 – 14:50	Coupled ATHLET/KIKO3DMG Analyses - ALLEGRO GFR and Rostov-2 VVER-1000	Bálint Batki CER
14:50 – 15:10	Applications of GRS Codes in NUBIKI	Pal Kostka NUBIKI
15:10 – 15:30	Modelling of SMRs Using AC ²	Mindaugas Valinčius LEI
15:30 – 16:00	Coffee Break	
16:00 – 16:20	ATHLET Developments within VASIL Project	Sinem Cevikalp, Nelson Rincon, pres. by M. Buch IKE
16:20 – 16:40	Modelling, Simulation and Analysis of a Supercritical Carbon Dioxide Decay Heat Removal System	Markus Hofer IKE
16:40 – 17:00	sCO ₂ Brayton Cycle Modelling for Heat Pipe-Cooled Micro Modular Reactors in ATHLET	Matthias Peiretti IKE
17:00 – 17:20	User-defined HTC correlations for supercritical parameters. "Robustness" problems.	Yuliia Filonova IPP Centre
17:20 - 17:40	Finding Errors and Optimizing ATHLET/CD Datasets	Andreas Wielenberg GRS
17:40 – 18:00	General Discussion: Future User Needs for ATHLET	All

2nd Day (Tuesday, November 28, 2023) Meeting place: GRS Garching, N001		
09:00 – 09:20	ATHLET-CD 3.4: New Features	Liviusz Lovasz GRS
09:20 – 09:40	Recent Activities in the Modeling of Lower Plenum Phenomena with ATHLET-CD	Peter Pandazis GRS
09:40 – 10:00	Overview of Current Activities at PSS on the Validation and Further Development of ATHLET and ATHLET-CD	Florian Krist RUB
10:00 – 10:20	Overview on ATHLET/ATHLET-CD Application for Accident Analysis at Helmholtz-Zentrum Dresden-Rossendorf	Frank Schäfer, Alexander Ponomarev HZDR
10:20 – 10:40	Use of GRS software at NRA SR	Ľubomír Činčala NRA Slovak republic
10:40 – 11:00	Coffee Break	
11:00 – 11:20	Aspects of SFP Mobile Pump Efficiency Analysis for VVER-440 with Application of ATHLET-CD	Maksym Vyshemirskiy SSTC NRS
11:20 – 11:40	Current ATHLET-CD Developments at IKE	Michael Buck IKE
11:40 – 12:00	ATHLET-CD: Current Development and Outlook	Liviusz Lovasz GRS
12:00 – 12:20	Extended ATHLET Fuel Rod Model	Anthony Di Nora GRS
12:20 – 12:40	General Discussion: Future User Needs for ATHLET-CD	All
12:40 – 14:00	Lunch Break	
14:00 – 14:20	HDF5 and Batchplot: Status, Tools and Future Prospects	Markus Junk GRS
14:20 – 14:50	Presentation of ATLASneo 1.0	Josef Scheuer GRS
14:50 – 15:10	AGM/ADM Demonstration	Zhuoqi Du GRS
15:10 – 15:30	ATHLET Coupling to CFD and CSM Codes	Fabian Weyermann GRS
15:30 – 15:50	Coffee Break	
15:50 – 16:20	Validation of the AC ² Codes ATHLET, ATHLET-CD and COCOSYS	Hollands / Reinke GRS
16:20 – 16:40	ATHLET-Validation using PKL-Data	Sebastian Buchholz GRS
16:40 – 17:00	ATLAS-3 Benchmark	Norman Dünne GRS
17:00 – 17:20	Participating in AC ² Development via GRS's External GitLab Server	Fabian Weyermann GRS

3rd Day (Wednesday, November 29, 2023)		
Meeting place: GRS Garching, N001		
09:00 – 09:20	COCOSYS V3.2: New Features and Outlook	Claus Spengler GRS
09:20 – 09:40	Latest Developments of the COCOSYS Module NewAFP for Aerosol, Fission Products and Iodine Chemistry	Holger Nowack GRS
09:40 – 10:00	Extended THAI Facility Supporting the AC ² Validation	Martin Freitag Becker Technologies
10:00 – 10:20	THAI-SMR Calculations with COCOSYS	Nils Reinke GRS
10:20 – 10:40	Simulation of VVER-Containment Using COCOSYS	Jonathan Zert GRS
10:40 – 11:00	Coffee Break	
11:00 – 11:20	Current Projects at the RUB using COCOSYS	Tobias Jankowski RUB
11:20 – 11:40	Results of the AMICO Projects	Gert Langrock Framatome GmbH
11:40 – 12:00	Study of Hydrogen Distribution Inside Armenian NPP Unit 2 Confinement During Severe LOCAs and the Associated Risks using COCOSYS Model	Maxim Bykov NRSC
12:00 – 12:20	Improved Modelling of Non-Condensable Gases in AC ²	Matthias Kunick HSZG
12:20 – 13:30	Lunch Break	
13:30 – 13:50	General Discussion: Future User Needs for COCOSYS	All
13:50 – 14:10	The Numerical Toolkit (NuT) in AC ² : New Features and Outlook	Tim Steinhoff GRS
14:10 – 14:30	Application of AC ² on Severe Accident Analyses for Real Nuclear Power Plants	Thomas Steinrötter GRS
14:30 – 14:50	Source Term calculation for VVER-1000 with AC ²	Siegfried Arndt GRS
14:50 – 15:10	Coffee Break	
15:10 – 15:30	Fukushima: AC ² Analysis and Measured Data	Sebastian Band GRS
15:30 – 16:00	Summary and Final Remarks	GRS