

Monday, Jan. 20

Food & Beverage Coffee break 11:45-12:15 AM; Lunch 01:00-02:30 PM; Coffee break 04:00-04:30 PM

Room C

10:30 AM

Welcome to participants

11:00 AM

Invited lecture: Dr. Stefano Monti “IAEA Coordinated Research Projects in the Field of Verification and Validation of Models and Codes for Innovative Fast Neutron Systems”

12:15 AM

Applications of system codes, coupled codes and coarse grid cfd Chairman: P. Meloni (ENEA)

ID#	Title	Presenter	Organizations
0011	RELAP5 and SIMMER-III Code Assessment on CIRCE Decay Heat Removal Experiments	G. Bandini	ENEA
0012	Validation of CATHARE T/H System Code Based on TALL Experimental Data	M. Polidori	ENEA / CEA

2:30 PM

Applications of system codes, coupled codes and coarse grid cfd Chairman: P. Meloni (ENEA)

ID#	Title	Presenter	Organizations
0004	Modeling of Liquid Metal Flow Using System Thermohydraulic Code HYDRA-IBRAE/LM and CFD Code CONV-3D	N.A. Mosunova	IBRAE / RAN
0039	Subchannel Scale Resolution in Homogenization Codes by The Coarse-Grid-Cfd	M. Viellieber	KIT
0020	Pb-Bi/Water Interaction in LIFUS5/MOD2 Facility Modelled by SIMMER Code	A. Pesetti	UNIFI / ENEA
0032	Identification of Complex Transients and Optimization of TALL-3D Facility Design	M. Jeltsov	KTH
0021	Reliability Evaluation of a Passive System Against Experimental Data	D. Araneo	UNIFI
0014	Thermal-hydraulic Analysis of the DHR System with the ICE Test Section	D. Martelli	UNIFI
0053	Comparison of Different Coupling CFD-STH Approaches for Pre-Test Analysis of a TALL-3D Experiment	A. Papukchiev	GRS

Room D

12:15 AM

Fundamental studies Chairman: I. Tiselj (JSI)

ID#	Title	Presenter	Organizations
0047	An Attempt to Simulate Multilayer Particle Resuspension in a Cavity	G. Lecrivain	HZDR
0031	Similarities Between Single and Multilayer Particle Deposition and Resuspension Experiments in Turbulent Flows	T. Barth	HZDR

2:30 PM

Fundamental studies Chairman: I. Tiselj (JSI)

ID#	Title	Presenter	Organizations
0034	Heat Transfer and Flow Stability in Flat Channel Under Buoyancy Influenced Flow Conditions	R. Poskas	LEI
0023	Production Scales and Spatial Fluxes in Turbulent Rayleigh-Benard Convection	A. Cimarelli	UNIBO
0024	Large Eddy Simulation of a Spatial Turbulent Mixing Layer in a Square Channel	H.A. Bijleveld	NRG
0051	Model Experimental Studies of Hydrodynamics and Heat Transfer for Verification of Computer Codes for Fast Reactors	N. A. Pribaturin	IT SB RAS
0052	Direct Numerical Simulation of Mixed Convection in a Bundle of Heated Rods	D. Angeli	UNIMORE
0049	Direct Numerical Simulation of Low Prandtl Number Turbulent Convection Above a Wavy Wall	E. Stalio	UNIMORE

Tuesday, Jan. 21

Food & Beverage Coffee break 10:30-11:00 AM; Lunch 01:00-02:30 PM; Coffee break 03:15-03:45 PM

Room C

9:00 AM

Invited lecture: Dr. Alessandro Alemberti “ALFRED: The European Lead Fast Reactor Demonstrator”

9:45 AM

Invited lecture: Dr. Jean-Claude Garnier “R&D program in support of the ASTRID Project”

11:00 AM

Applications of system codes, coupled codes and coarse grid cfd Chairman: A. Papukchiev (GRS)

ID#	Title	Presenter	Organizations
0025	Multi-Scale Coupling of STH and CFD Codes for Pre-Test Analysis of TALL-3d Experiments	M. Jeltsov	KTH
0042	Multi-Scale Uncertainty Analysis of the TALL Experiment	C. Geffray	TUM
0041	Design and Commissioning Tests of the TALL-3D Experimental Facility for Validation of Coupled STH and CFD Codes	D. Grishchenko	KTH
0010	Overview of the System Alone and System/CFD Coupled Calculations of the PHENIX Natural Circulation Test Within the THINS Project	D. Pialla	CEA / IRSN / KIT
0016	Calculation of the PHENIX End-of-life Test in Natural Circulation with the DYN2B System-Code	L. Maas	IRSN

2:30 PM

Invited lecture: Prof. Peter Baeten “Status of the MYRRHA project”

3:45 PM

Modeling turbulence Chairman: Y. Bartosiewicz (UCL)

ID#	Title	Presenter	Organizations
0009	Status and Perspective of Turbulence Heat Transfer Modelling for the Industrial Application of Liquid Metal Flows	F. Roelofs	NRG / UCL / AS-COMP / MIT / KIT
0002	An Algebraic Heat Flux Model for Low-Prandtl Fluids	A. Shams	NRG
0027	Evaluation of Four Parameter Heat Transfer Turbulence Model for Forced LBE Flows in Different Geometries.	S. Manservigi	UNIBO
0003	Extensive Validation of RANS Modeling Approach for Dust Transport and Deposition in an HTR	S. Jayaraju	NRG

Room D

11:00 AM

Accelerator Driven Systems Chairman: K. Van Tichelen (SCK-CEN)

ID#	Title	Presenter	Organizations
0044	CFD Simulation of the Thermo-Hydraulics of the MYRRHA Reactor	L. Koloszar	VKI
0045	Water Model for the Thermo-hydraulic Study of MYRRHA	P. Blanquart	VKI
0046	Lagrangian Tracking of Fuel Particles in the MYRRHA reactor	S. Buckingham	VKI

3:45 PM

Nuclear core thermal-hydraulics Chairman: W. Ambrosini (UNIPI)

ID#	Title	Presenter	Organizations
0033	Numerical Study of Pressure Drop in Heavy Liquid Metal 19 Pin KALLA Rod Bundle Experiment Employing a Grid Spacer	A. Batta	KIT
0001	Detailed Investigation of Flow Through Wire-Wrapped Fuel Assemblies using Computational Fluid Dynamics	V. R. Gopala	NRG
0019	Validation of RANS CFD Models for Gas Cooled Fuel Rod Analyses	H. Suikkanen	LUT
0013	Leading CFD Models for Innovative Nuclear Applications at CRS4	M. Profir	CRS4
0054	Supercritical Heat Transfer Experiments in Support of Development of Canadian SCWR Concept	L. K.H. Leung	CRL

8:00 PM

Social dinner Trattoria Aldina, via Luigi Albinelli 40, Modena, Italy

Wednesday, Jan. 22

Food & Beverage Coffee break 10:30-11:00 AM; Lunch 12:30-01:30 PM

Room C

9:00 AM

Invited lecture: Dr. David Pointer “NEAMS Toolkit: a High Performance Computing Solution for Nuclear Reactor Performance and Safety”

9:45 AM

Invited lecture: Dr. Iztok Tiselj “The NURES SAFE European Project”

11:00 AM

Modeling turbulence Chairman: S. Manservigi (UNIBO)

ID#	Title	Presenter	Organizations
0050	Results of 4-Equation Turbulence Models in the Prediction of Heat Transfer to Supercritical Pressure Fluids	W. Ambrosini	UNIFI
0007	Using Periodical Boundary Conditions to Thermal-Hydraulic Calculation of Fuel Assembly with Ribbed Fuel Rods	A.G. Chukhlov	NIKIET
0018	Investigation of Thermal Variable Property Wall Functions for Use in Super-critical Water Heat Transfer	R. Thiele	KTH

Room D

11:00 AM

Nuclear core thermal-hydraulics Chairman: F. Roelofs (NRG)

ID#	Title	Presenter	Organizations
0008	Numerical Simulations of Nuclear Pebble Bed Configurations	A. Shams	NRG
0028	Experimental Investigation of Lead-Bismuth-Eutectic Flow and Heat Transfer in Hexagonal-lattice Rod Bundles with Grid Spacers	J.C. Pacio	KIT
0030	Experiment Results for Heated Rod in the L-STAR Facility	R. Gomez de Leija	KIT
0005	E-SCAPE: A Scale Facility for Liquid-Metal, Pool-Type Reactor Thermal Hydraulic Investigations	K. Van Tichelen	SCK / UNIFI

Guided tour to Ferrari museum

Guided tour and tickets are offered by UNIMORE; driving simulator is not included (7 minutes 25 EUR)

2:00 PM Conference bus leaves the DIF department (conference venue)

2:30 PM Ferrari museum

2:45 PM Start of the guided tour (takes one hour)

4:15 PM Conference bus leaves Maranello

5:00 PM Conference bus arrives in the city center (Largo Garibaldi)

5:19 PM AERBUS by SETA leaves to the Bologna Airport
http://www.setaweb.it/azienda/altri_servizi_aerbus.php

6:05 PM Expected arrival at the Bologna Airport of the AERBUS by SETA