

Agenda
Prof. Alireza Haghghat, Virginia Tech
Jozef Stefan Institute, Slovenia, Jan 8 –Jan 18, 2019

Date	#	Topic	Time
Jan 8	1	Discrete Ordinates Methods for Solving the Integro-differential Linear Boltzmann Equation	8:30 – 11:30
	2	Parallel Computing	13:00 – 16:00
	3	PENTRAN Code System & its use	
	4	Characteristics methods, TITAN Code System & its use	
Jan 9	5	Adaptive Collision Source, implementation and use	8:30 – 11:30
	6	Adjoint Linear Boltzmann Equation and Importance Equation, determination of importance function, its use	13:00 – 16:00
Jan 10	7	Monte Carlo Methods	8:30 – 11:30
Jan 11	8	Hybrid Methods	8:30 – 11:30
		<i>Discussion with Researchers</i>	13:00
		<i>Discussion on the MOU</i>	
Jan 14	9	MRT Methodology	8:30 – 11:30
	10	RAPID Code System Formulations including time-dependent <i>b</i> RAPID & <i>t</i> RAPID	
		<i>Meeting with JSI Director</i>	14:00
		<i>Meeting with Dean of Faculty of Math & Physics</i>	15:00
		<i>Colloquium – The Faculty of Math & Physics</i>	16:00 – 17:00
Jan 15	11	Benchmarking of the RAPID Code System	8:30 – 11:30
		RAPID Workshop (session 1)	13:00 – 16:00
	12	Introduction to the Virtual Reality System (VRS) web-application for RAPID (VRS-RAPID)	
	13	Discussion on the FM coefficients pre-calculations	
	14	pRAPID software for pre-calculation using MCNP or Serpent Monte Carlo codes	
		Run Serpent for determination of fuel burnup for one PWR assembly for application to the GBC-32 benchmark problem.	
Jan 16		RAPID Workshop (session 2)	8:30 – 11:30
	15	Definition of the GBC-32 benchmark problem & Perform pRAPID with Serpent calculation to generate FM coefficients for the GBC-32 eigenvalue calculation	
	16	Further discussion on the FM coefficients using the JSI's TRIGA reactor Serpent model	
Jan 17		RAPID Workshop (session 3)	8:30 – 11:30
	17	Perform pRAPID with MCNP calculation to generate DRF Coefficients for detector response calculation	
	18	Process and prepare FM coefficients database for GBC-32 & Move the FM database to the VRS server	
	19	Perform VRS-RAPID eigenvalue simulations for different GBC-32 test problems	
		<i>Meeting with NPP & Regulators & Presentation on RAPID</i>	13:00 – 14:00
	20	Process and prepare DRF coefficients database Move the DRF database to the VRS server	14:00 - 16:00
	21	Perform VRS-RAPID simulations for detector analyses and safeguards studies	
Jan 18		<i>RAPID & future collaborations</i>	8:30 – 11:30
		<i>Discussion on the exercises</i>	
	22	<i>Status of RAPID and future activities</i>	
		<i>Discussion on the TRIGA benchmarking studies</i>	
		<i>Discussion on the future collaborations and joint activities</i>	13:00
		<i>Finalizing the MOU</i>	