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# Joint ICTP-IAEA 2nd Course on Scientific Novelties in the Phenomenology of Severe Accidents in Water Cooled Reactors | (smr 3303)

## Monday 24 June 2019

### **notitle - Euler Lecture Hall (LB) (08:30-11:30)**

time	title	presenter
08:30	Administrative and Financial formalities	
10:00	Opening Remarks: ICTP & IAEA	
10:30	Coffee break	
10:45	Introduction to Course Scope and Expectations; Group Projects	MIASSOEDOV, Alexei

### **Background - Euler Lecture Hall (LB) (11:30-17:30)**

time	title	presenter
11:30	1. Fundamentals of Water Cooled Reactors	MIASSOEDOV, Alexei
12:30	Lunch break	
14:00	2. Nuclear Safety of Water Cooled Reactors	FICHOT, Florian
15:00	3. Defense-in-Depth and Design Plant Envelope	MASSARA, Simone
16:00	Coffee break	
16:15	4. Progression of Fukushima Daiichi Accident and its Consequences	HERRANZ, Luis

### **notitle - Leonardo Building Terrace (19:00-21:00)**

time	title	presenter
19:00	Welcome reception	

## Tuesday 25 June 2019

### **Phenomenology in Propagation of Severe Accidents - Euler Lecture Hall (LB) (08:30-17:30)**

time	title	presenter
08:30	5. Classification of Severe Accidents Phenomena into Three Levels of Scientific Knowledge: High, Medium and Low	HERRANZ, Luis
10:00	Coffee break	
10:15	6. Nuclear Fuel Degradation; Relocation of Melted Fuel	FICHOT, Florian
11:00	7. Physics and Chemistry of Source Term. Part I	HERRANZ, Luis
12:00	Group photo	
12:05	Lunch break	
13:30	8. Physics and Chemistry of Source Term. Part II	HERRANZ, Luis
14:30	9. Fission Product Behaviour and Transport	HERRANZ, Luis
15:30	Coffee break	
15:45	10. Hydrogen Generation, Transport and Explosion	KLJENAK, Ivo

## Wednesday 26 June 2019

### **Phenomenology in Propagation of Severe Accidents - Euler Lecture Hall (LB) (09:00-10:45)**

time	title	presenter
09:00	11. Reactor Vessel Failure Mechanisms; Early and Late- Phase Containment Failure	FICHOT, Florian
10:30	Coffee break	

### **Technological Challenges in Propagation of Severe Accidents and Mitigation of their Consequences - Euler Lecture Hall (LB) (10:45-14:00)**

time	title	presenter
10:45	12. Active and Passive Core Cooling	MASSARA, Simone
11:30	13. Active and Passive Containment Cooling	MIASSOEDOV, Alexei
12:30	Lunch break	

### **Introduction of Group Projects - Euler Lecture Hall (LB) (14:00-15:00)**

time	title	presenter
14:00	Essays: Presentations from 4 Course Participants	MIASSOEDOV, Alexei

### **Practical Exercise: Group Project - Euler Lecture Hall (LB) (15:00-17:30)**

- Conveners: Fichot, Florian; Massara, Simone; Miassoedov, Alexei

time	title	presenter
16:00	Coffee break	

## Thursday 27 June 2019

### **Severe Accident Management - Euler Lecture Hall (LB) (09:00-10:45)**

time	title	presenter
09:00	14. IAEA Safety Standards and Guidelines	MASSARA, Simone
10:00	15. IAEA SAMG-D Toolkit and THERPRO Database	MIASSOEDOV, Alexei
10:30	Coffee break	

### **Technological Challenges in Propagation of Severe Accidents and Mitigation of their Consequences - Euler Lecture Hall (LB) (10:45-16:15)**

time	title	presenter
10:45	16. In-Vessel Melt Retention and Ex-Vessel Corium Cooling	FICHOT, Florian
11:30	17. Containment Pressure Venting and Prevention of Hydrogen Explosions	TROMM, Walter
12:30	Lunch break	
14:00	18. IAEA Activities Related to In-Vessel Melt Retention and Ex-Vessel Corium Cooling	MASSARA, Simone
15:00	19. Numerical Simulations of Severe Accident Phenomena	FICHOT, Florian
16:00	Coffee break	

### **Practical Exercise: Group Project - Euler Lecture Hall (LB) (16:15-17:30)**

- Conveners: Fichot, Florian; Massara, Simone; Miassoedov, Alexei

## Friday 28 June 2019

### **Technological Challenges in Propagation of Severe Accidents and Mitigation of their Consequences - Euler Lecture Hall (LB) (09:00-11:30)**

time	title	presenter
09:00	20. Emergency Preparedness and Response	TROMM, Walter
10:15	Coffee break	
10:45	21. Decommissioning and Waste Management after Severe Accidents	TROMM, Walter

### **Assessment Quiz - Euler Lecture Hall (LB) (11:30-14:00)**

- Conveners: Miassoedov, Alexei

time	title	presenter
12:30	Lunch break	

### **Best Course Participants Essay - Presentations: Group Projects - Euler Lecture Hall (LB) (14:00-16:15)**

time	title	presenter
15:30	Coffee break	

### **Closing Remarks: ICTP & IAEA - Euler Lecture Hall (LB) (16:15-17:30)**