











The CAPES/PROEX PPGSHS EESC/USP, in association with Federal University of Pernambuco and Federal University of Campina Grande, will host the CAPES School of Advanced Studies of Water & Societies under Change at the <u>CETISC Amphitheatre (USP São Carlos)</u>

## SCHOOL OF ADVANCED STUDIES OF WATER AND SOCIETIES UNDER CHANGE – MODELLING AND MEASURING HYDROLOGIC SYSTEMS



Prof. Dr. Dimitri Solomatine

IHE Delft Institute for Water Education, the Netherlands

Context: The School of Advanced Studies of Water & Society under Change is divided into six different modules, which share same objectives of other running projects developed by local and international institutions. Every visiting professor, from national and foreign institutions, were allocated according to their experiences at their home institutions and recent published articles in journals. For the module "Modelling and Measuring Hydrologic Systems" the EESC-USP will receive professors from foreign institutions in order to share experiences about recent advances in the research field of hydrological modelling. The invited professors in this section have published several articles that they analyse how hydrologic systems and social aspects interacts among themselves. During Prof. Solomatine course, the students will be introduced to modelling theory and model uncertainty, fundamentals of data-driven modelling, and various applications of artificial (computational) intelligence techniques to water-related problems.

**Short Bio:** Prof. Dimitri Solomatine is the head of the Hydroinformatics Chair group. His research interests include hydroinformatics, integration of models and remote sensing data, modelling, optimization, systems engineering, analysis of models uncertainty, computational intelligence, internet-based computing and decision support. He is an associate editor of the Journal of Hydroinformatics and of the Hydrology and Earth System Sciences, serves on the International Scientific Committee of all hydroinformatics conferences since 1994. He is the co-founder and chairman of the sub-division on Hydroinformatics of the European Geosciences Union. More information: http://www.un-ihe.org/dimitri-solomatine.

**Credits:** 2 credits provided by USP (only for enrolled participants).

Registration: Free-of-charge. Send email to mclarafava@usp.br and emm@sc.usp.br.



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**Registration:** Free-of-charge, limited positions. Send email to emm@sc.usp.br and mclarafava@usp.br. **Live Streaming:** e.usp.br/cetisc-aovivo. **Credits:** only for enrolled participants. Registration at the Graduate Programme in Hydraulics and Sanitation Engineering – University of São Paulo, Federal University of Pernambuco and Federal University of Campina Grande. **More information:** www.eesc.usp.br/ppgshs.















## **Modelling and Measuring Hydrologic Systems**

Hydroinformatics: optimal integration of data, models and artificial intelligence, with applications to water problems.

Professor Dimitri Solomatine

Time	Monday	Tuesday	Wednesday	Thursday	Friday
	(26.08)	(27.08)	(28.08)	(29.08)	(30.08)
08:30 - 09:15		lecture 3	lecture 5		
09:15 - 09:30		short-break	short-break		students
09:30 – 10:15		lecture 3	lecture 5		seminar*
10:15 – 10:30	course opening	short-break	short-break		
10:30 – 11:15	lecture 1	lecture 4	lecture 6		course closure
11:15 – 11:30	short-break	short-break	short-break		
11:30 – 12:15	lecture 1	lecture 4	lecture 6		
12:15 – 14:00	lunch-break	lunch-break	lunch-break		
14:00 – 14:45	lecture 2		lecture 7		
14:45 – 15:00	short-break	students	short-break		
15:00 – 15:45	lecture 2	seminar*	lecture 7		
15:45 – 16:30			-		

<sup>\*</sup> Time for feedback from the students, mentoring and solving of specific questions.