COCOS Short Courses

Testing and Validation of Computer Simulation Models (VAL)
Inverse Problems, Inverse Models and Inverse Simulation Methods (IVS)

David Murray-Smith, School of Engineering, University of Glasgow

TU Vienna:  Testing and Validation of Computer Simulation Models (VAL)

Tuesday, May 24, 2016 15.30 – 19.00, HS14 Main Building TU Vienna

VAL1 Introduction to model testing, verification and validation
VAL2 Methods of Simulation Model Verification and Validation
VAL3 Model Management Issues

Thursday, June 2, 2016, 15.30 – 19.00, FH5 Freihaus Building TU Vienna

VAL5 Engineering Case Study 2
Hydro-turbine modelling and control based on model development from physical principles and testing of real system
VAL6 Engineering Case Study 3
Helicopter model validation based on a combined theoretical modelling and experimental approach:
VAL 8 Physiological Case Study 2
Modelling of elements of the neuromuscular system involved in regulation of posture and control of movement

MMS Summerschool Bad Fischau:

Testing and Validation of Computer Simulation Models (VAL)
Inverse Problems, Inverse Models and Inverse Simulation Methods (IVS)

Thursday, May 26, 2016, 9.00 – 13.00  VAL
Testing and Validation of Computer Simulation Models (VAL)

VAL1 Introduction to model testing, verification and validation
VAL2 Methods of Simulation Model Verification and Validation
VAL3 Model Management Issues.

Friday May 27, 9.00 – 13.00  IVS
Inverse Problems, Inverse Models and Inverse Simulation Methods (IVS)

IVS1 Introduction to inverse problems, inverse models and inverse simulation concepts
IVS2 A review of methods of inverse simulation
IVS3 Case Studies and Discussion

Sunday, May 29, 2016, 10.00 – 13.00
Testing and Validation of Computer Simulation Models (VAL)

VAL4 Engineering Case Study 1
Simulation model development and testing for a simple laboratory system involving two coupled tanks:
VAL7 Physiological Case Study 1
Compartmental modelling of the gas-exchange processes of the human lungs

Place: Seminargasthof Fromwald, Wiener Neustädter Straße 20, 2721 Bad Fischau-Brunn (50 km südlich von Wien)
Registration: Participation without charge.
Informal registration via email to Ruth.Leskovar@tuwien.ac.at (Name, Email, Courses / Modules / Place)