



# Workshop on “The Debate on Mathematical Modeling in the Social Sciences”



## SCIENTIFIC COMMITTEE:

Steering Committee of the Program ESF - PSE, Leader and Co-leader of Team C  
("Philosophy of the Cultural and Social Sciences").

## ORGANIZING COMMITTEE:

Wenceslao J. Gonzalez, Amparo Gomez, Antonio Bereijo,  
Maria Jose Arrojo, Maria G. Bonome, Paula Neira.

## CONFERENCE CENTER:

Vicerrectorate of Ferrol Campus  
Doctor Vazquez Cabrera Street, w/n  
15403-Ferrol  
(A Coruña)

## VENUE:

Meeting Room, Second floor of the building of the Vicerrectorate of Ferrol Campus.

## THURSDAY, 23 SEPTEMBER 2010

Opening Addresses:

9:15 - 9:30 Wenceslao J. Gonzalez (Leader of Team C), Maria Carla Galavotti (Chair of the Steering Committee of the Program ESF-PSE), and Jose Maria Barja (Rector of the University of A Coruña)

### 1) MATHEMATICS AND ITS ROLE IN MODELING

9:30 - 10:15 "Quantities as Realistic Idealizations," Ilkka Niiniluoto (University of Helsinki, Finland).

10:15 - 11:00 "Mathematics as Quasi-matter to Build Models as Instruments," Marcel Boumans (University of Amsterdam, The Netherlands).

Coffee Break: 11:00—13:30

11:30 - 12:15 "Models of Epistemic Networking — Status and Perspectives," Rainer Hegselmann (University of Bayreuth, Germany).

12:15 - 13:00 "Mathematical Models and Economic Forecasting: Uses and Mis-Uses of Mathematics in Economics," David F. Hendry (Oxford University, United Kingdom).

Lunch: 13:30

### 2) MATHEMATICAL MODELS IN THE SOCIAL SCIENCES

16:30 - 17:15 "From Mathematical to Techno-matematical Models in Social Sciences," Javier Echeverría (University of the Basque Country/Ikerbasque and CSIC, Spain).

17:15 - 18:00 "The Use of Mathematics in Physics and Economics: a Comparison," Donald Gillies (University College London, United Kingdom).

Coffee Break: 18:00—18:30

18:30 - 19:15 "Mathematical Modeling in Cognitive Science," Daniel Andler (Ecole Normale Supérieure; Université de Paris-Sorbonne; Institut Universitaire de France; Paris, France).

19:15 - 20:00 "What can the Social Sciences Learn from the Process of Mathematization in the Natural Sciences," Ladislav Kvas (Comenius University, Slovak Republic).

Dinner: 21:00

## FRIDAY, 24 SEPTEMBER 2010

### 3) CAUSALITY AND MODELS IN SOCIAL RESEARCH

9:30 - 10:15 "Probability, Causality and the Law," Maria Carla Galavotti (University of Bologna, Italy).

10:15 - 11:00 "On the Causal Interpretation of Statistical Models in Social Research," Federica Russo (University of Kent, United Kingdom).

Coffee Break: 11:00—13:30

11:30 - 12:15 "Modeling, Prediction, and Explanation," António Zilhão, (University of Lisbon, Portugal).

12:15 - 13:00 "Experiments in Political Theory. The Case of the Voting Rules," Adrian Miroiu (National School of Political Studies and Public Administration, Bucharest, Romania).

Lunch: 13:30

Visit to A Coruña (Tower of Hercules, Riazor, ...)

Dinner: 21:00

## SATURDAY, 25 SEPTEMBER 2010

Visit to Santiago de Compostela (Cathedral, Obradoiro, ...)

Lunch: 13:30

Dinner: 21:00