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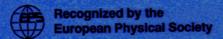
Proceedings of the

Europhysics Conference on Computational Physics

CCP 1998

Granada, 2-5 September 1998

Guest Editors: J. Marro, P.L. Garrido, R. Toral



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Preface

This volume contains the Proceedings of the *Europhysics Conference on Computational Physics*, 'CCP 1998', held in Granada, 2–5 September 1998, which focused on **Modeling Collective Phenomena in Complex Systems**.

The CCP 1998 was organized jointly by the Computational Physics Group of the European Physical Society and the Institute 'Carlos I' for Theoretical and Computational Physics of the University of Granada, in collaboration with the Commission on Computational Physics (C20) of the International Union of Pure and Applied Physics and the American Physical Society. Additional sponsorship by the East-West Task Force of the EPS, the regional government 'Consejería de Educación y Ciencia', the Granada Mayor Office, the University of Granada, the Spanish 'Ministerio de Educación y Cultura', the UK Institute of Physics, M.A. Valenzuela S.A. and Apple Computer Inc. is thankfully acknowledged.

The CCP 1998 was the tenth of a series of either APS or EPS 'PC' Conferences held previously in Boston (1989), Amsterdam (1990), San Jose (1991), Prague (1992), Albuquerque (1993), Lugano (1994), Pittsburgh (1995), Cracow (1996) and Santa Cruz (1997); these series were coordinated with similar efforts in Asia (the 'ICCP's at Beijing in 1988 and 1993, Taiwan 1995 and Singapore 1997). The CCP 1998 also replaced the fifth Granada Seminar on Computational Physics, a series of workshop-schools which we organize every two years as part of a local doctoral programme. The next two editions of the Granada Seminar are scheduled for 4–10 September 2000 and 2–8 September 2002, respectively; they will be Euro Summer Schools, i.e., mainly financed by the European Commission, DG XII (through the Fourth Framework Programme).

I wish to briefly mention that, as pointed out to us by many colleagues, the CCP 1998 was an agreeable and scientifically exciting conference. Indeed, this fact had intuitively been expected by those involved: there were 437 accepted contributions, and the final participants came from Europe, including 82 from Spain, 143 from the rest of the EU and 76 from other European countries, as well as from Latin America (60), North America (47), Japan (22), Israel (7), Algeria (6), India (6), and other countries – Armenia, Australia, Iran, Morocco, Singapore, South Africa, Turkey and UA Emirates (totaling 15 more attendees). A total of 190 participants received some sort of support directly from the organization.

The Scientific Advisory Committee appointed by the EPS and IUPAP Computational Physics Commissions and the local committee headed by Dr. Pedro L. Garrido (*Universidad de Granada*) and Dr. Raúl Toral (*Universidad de las Islas Baleares*) shared in all the merit of assembling and coordinating so many pieces together into an useful meeting. The final outcome – of which the present volume of *Computer Physics Communications* is a better record than my word – was also a consequence of the remarkably high quality and friendly cooperativeness of invited speakers and other contributors. I wish to thank all of them for their effort, a valuable one in making 'Computational Physics' such a powerful interdisciplinary field of science.

J. Marro P.L. Garrido R. Toral Guest Editors