

Preface

This is with a great pleasure that I edit these three volumes 23, 24 and 25 of the International Journal of Computing Anticipatory Systems, Partial Proceedings of CASYS'09.

This 9th International Conference on Computing Anticipatory Systems, CASYS'09, took place at the *HEC Management School – University of Liege*, Liège, Belgium, August 3-8, 2009, and was organised by our non-profit association, ASBL CHAOS, Centre for Hyperincursion and Anticipation in Ordered Systems, Institute of Mathematics of the University of Liège..

The ASBL CHAOS is Member of the **IFSR, International Federation for Systems Research**.

For the CHAOS Award Ceremony at CASYS'09, **Professor Yves Coppens (France), Invited Speaker**, received the **CHAOS AWARD with a Crystal Eagle Owl of Val Saint-Lambert**, for his outstanding scientific works on *The Origin of Man*, during a ceremony where he presented an invited talk on *How, Why, Where and When a Primate Became a Man*.

CASYS'09 was proud to welcome 226 authors and co-authors, from 38 different countries, who presented 139 papers to the 10 symposia, held in 4 parallel session rooms. They presented high quality papers with new theories and applications in computing anticipatory systems.

All these authors are thanked for their collaboration to the success of this conference and for their high level scientific contributions.

Each paper in these proceedings was peer reviewed. Indeed, all the draft papers have undergone a pre-screening for topical applicability and the review process was performed with about 40 different referees. Each paper has undergone a critical review by independent experts.. Each referee received a copy of the paper to be reviewed and a questionnaire of review to be filled and scored. The comments of the anonymous referees were communicated to authors to improve their final paper.

All the papers who received a Best Paper Award at CASYS'09, and a selection of invited papers, appeared in **COMPUTING ANTICIPATORY SYSTEMS: CASYS'09 – Ninth International Conference**, edited by D. M. Dubois, published by The American Institute of Physics, AIP Conference Proceedings # 1303, 2010.

All the other invited and accepted papers, presented at CASYS'09, are published in these CASYS volumes 23, 24 and 25.

This volume 23 deals with invited and accepted papers presented in the Symposiums 1, 2 and 3 of CASYS'09.

The Introduction of this volume deals with the paper “*The Natural Metaphysics of Computing Anticipatory Systems*” of Nick Rossiter and Michael Heather (United Kingdom).

The first chapter of this volume deals with the papers presented at the invited sessions on **Anticipation from a Transcendental Perspective**, organised by Gertrudis Van de Vijver, who is thanked for her contribution to this conference.

Then, the second chapter on **Systems Research, Applied Logic and Mathematics** contains papers presented in symposiums 1 and 2 at CASYS'09.

Finally, the third chapter on **Physics, Quantum Field Theory, and Gravitation** gives papers presented at the symposium 3, with a few papers presented in a special session on **Optics, Electromagnetism and Quantum Field Theory** organized by Gilles L. Nibart.

Daniel M. Dubois,
Director of asbl CHAOS,
President of CASYS