

## Advances in statistical physics

Editorial

Constantino Tsallis<sup>1\*</sup>, Giorgio Kaniadakis<sup>2†</sup>, Anna Carbone<sup>2‡</sup>, Antonio M. Scarfone<sup>3§</sup>,  
Krzysztof Malarz<sup>4¶</sup>

1 *Centro Brasileiro de Pesquisas Físicas, Department of Theoretical Physics and National Institute of Science and Technology for Complex Systems  
Rua Dr. Xavier Sigaud, 150, Urca, Rio de Janeiro, 22290-180 Brazil*

2 *Politecnico di Torino, Dipartimento di Fisica  
Corso Duca degli Abruzzi 24, I-10129 Torino, Italy*

3 *Dipartimento di Fisica and Istituto Nazionale per la Fisica della Materia (CNR-INFM), Sezione del Politecnico di Torino  
I-10129, Italy*

4 *AGH University of Science and Technology, Faculty of Physics and Applied Computer Science  
al. Mickiewicza 30, PL-30059 Cracow, Poland*

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The current issue of the Central European Journal of Physics is the second topical issue in the seven years old journal history. The previous topical issue, published in issue 7(2), was totally devoted to surface science.

The participants of the the  $\Sigma\Phi$  2008<sup>5</sup> conference were invited to submit their contributions to this topical issue.

The 2nd International Conference on Statistical Physics ( $\Sigma\Phi$  2008) took place in Kolymbari, Crete, 14–18 July 2008. The first edition of the Conference took place again in Kolymbari on 13–18 August 2005. The next edition is planned to take place in Cyprus on July 2011. The Con-

ference organization was made possible through a joint effort by three different universities:

- Politecnico di Torino, Italy,
- Technical University of Crete, Greece,
- University of Cagliari, Italy.

The organization of this Conference settled the foundation of a series hold up to following a three-year cycle. The founding declaration, undersigned by more than 100 physicists, is now deposited at the Orthodox Academy of Crete and will move to the sites of the future editions of the Conference. The text of the founding declaration is inspired by the book E, rows 269–275, of the Homerus Odyssey as a metaphor of the knowledge willing pursued by the humanity.

The objective of the Conference was to provide the opportunity for interaction and cross-fertilization between

\*E-mail: tsallis@cbpf.br

†E-mail: giorgio.kaniadakis@polito.it

‡E-mail: anna.carbone@polito.it (Corresponding author)

§E-mail: antonio.scarfone@polito.it

¶E-mail: malarz@agh.edu.pl

<sup>5</sup> <http://www.polito.it/sigmaphi2008/>

theorists and practitioners of Statistical Physics. The delegates came from very different fields, such as applied mathematics, fluid, networks, econophysics. Consequently, the central sessions were organized along mostly methodological topics in order to facilitate interaction among participants. Eight satellite workshops and symposia addressed to specific topics have been organized in parallel. A total of 80 invited talks dealing with the hottest topics in the field of statistical physics have been included in the program. Among the 450 abstracts initially received, 300 communications have been accepted for oral or poster presentation. We take this opportunity to thank all the participants for the excellent atmosphere of the meeting.

The present issue gathers the full-length versions of several presentations and talks given during conference (among others).

Another selection of papers, presented at the  $\Sigma\Phi$  2008 Conference, are published separately in special issues of *European Physical Journal B* and *Journal of Statistical Mechanics: Theory and Experiment*. We take this opportunity to thank all the authors for their valuable contributions and all the reviewers for their kind and thoughtful help. Finally, we acknowledge all the Journal Editors and Publishers for supporting and hosting these special issues. We are deeply convinced that the establishment of the  $\Sigma\Phi$  conference has contributed and will continue to maintain existing interactions and foster new ones in the exciting areas of the fundamental and applied Statistical Physics.

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