Report for the C3 Commission (Statistical Physics) to the IUPAP submitted on 9 October 2018

We have mentioned in our last report (late April 2018) that the C3 Commission for Statistical Physics is responsible for running the IUPAP STATPHYS Conference, which has been held 26 times so far; the last such meeting, STATPHYS 26, was held in Lyon, France; the next one, STATPHYS 27, is scheduled from 8-12 July 2019 in Buenos Aires.

As soon as the new C3 Commission was confirmed, its members started working on the plans for STATPHYS 27, with the Chair of STATPHYS 27, Professor Sylvina Ponce Dawson. The International Advisory Committee and the Steering Committee were set up. Professor Dawson then sought nominations for speakers, for both plenary and invited talks, from the members of the International Advisory Committee, the Steering Committee, and the members of the C3 Commission. The excellent nominations (nearly 600) were then discussed in the meeting of the Steering Committee that was held in Buenos Aires from 10-12 April 2018; the C3-Commission Chair, Vice Chair, and Secretary, who are members of the Steering Committee, attended this meeting. During this meeting a list of plenary and invited speakers was drawn up. Professor Dawson sent invitations to them; and most of these invitees accepted the invitation to lecture at STATPHYS 27. [The list of plenary and invited speakers is now available at https://statphys27.df.uba.ar/speakers.html.]

The Steering Committee of STATPHYS 27 has taken special care to ensure (a) that at least 20 percent of the speakers are women and (b) that there are speakers from different parts of the world. This Committee has also put together lists of experts who have been asked to serve on Topics Committees (there are 8 Topics in STATPHYS Meetings); these experts are responsible for selecting oral presentations from the contributed abstracts. [The lists of Topics and Topics Committees is now available at https://statphys27.df.uba.ar/topics.html.]

During such STATPHYS conferences, the C3 Commission meets and the Boltzmann Medal is awarded to outstanding Statistical Physicists (chosen by votes of the members of the C3 Commission, the former Chair of the C3 Commission, the Chair of the Organizing Committee for the STATPHYS Conference, and previous Boltzmann Medalists). In addition, in the last four meetings, Young Scientists Prizes have been awarded to highly promising young Statistical Physicists. After email consultations with all the members of the C3 Commission, we have sent out calls for nominations for the Boltzmann Award(s) and the Young Scientists Prizes to statistical physicists all over the world. These calls have also been announced on the website of STATPHYS 27 [https://statphys27.df.uba.ar/boltzmann.html and https://statphys27.df.uba.ar/scientist.html].

Traditionally, several Satellite Meetings are held near the main STATPHYS meetings, either before or after these meetings. We are happy to report that several such Satellite Meetings have been planned around STATPHYS 27. A list of these Satellite Meetings is now available at https://statphys27.df.uba.ar/satellites.html .

Other organizational details, such as abstract-submission deadlines and the Proceedings of STATPHYS 27 were discussed with Professor Dawson and other members of the Local Organising Committee for STATPHYS 27. These details are available on the website of STATPHYS 27 [https://statphys27.df.uba.ar], which is updated at regular intervals.

After e-mail consultations with all the members of the C3 Commission, we have prepared nominations for four Associate Members for the C3 Commission. These nominations are being submitted separately.

We list below some recent conferences in the area of Statistical Physics that have received support from the IUPAP. The STATPHYS 27 Meeting (8-12 July 2019) has been recommended for the highest level of support from the IUPAP.

Sponsored Commission Conferences

C3: Commission on Statistical Physics

<u>Unifying Concepts in Glass Physics (UCGP 2018)</u> 11 - 15 June 2018, Bristol, UK

Endorsed Commission Conferences

C3: Commission on Statistical Physics

- Active Matter and Non-Equilibrium Statistical Physics (AMNSP 2018)
 27 August 21 September 2018, Les Houches, France
- <u>Dynamics and thermodynamics of interacting systems from classical to</u> guantum (DTISCO 2018)
 - 7 10 May 2018, Trieste, Italy
- Workshop on Complex Biological Oscillations (WCBO 2018)
 - 9 13 September 2018, Buckinghamshire, UK
- New Trends in nonequilibrium statistical mechanics: classical and quantum systems (NTNSMCQ 2018)
 - 25 31 July 2018, Palermo, Italy
- Conference of Middle-European Cooperation in Statistical Physics, the 43th edition (MECO-43)
 - 1 4 May 2018, Krakow, Poland

Rahul Pandit, Chair, C3 Commission (Statistical Physics) of the IUPAP

Maxi San Miguel, Vice Chair, C3 Commission (Statistical Physics) of the IUPAP

Lucilla de Arcangelis, Secretary, C3 Commission (Statistical Physics) of the IUPAP