

FOREWORD

F. Herpin, President of the SF2A

As the president of the French Society of Astronomy and Astrophysics (*Société Française d'Astronomie et d'Astrophysique* - SF2A), it is an honour for me to write this foreword. Even if the president says this every year, I want to underline again that the annual meeting of the SF2A is a very important moment for our French community, the only place where permanent, doctoral and post-doctoral researchers can exchange their ideas and present to the whole community their new discoveries.

The 2019 edition took place from May 14th to May 17th in Nice, having been efficiently prepared by members of the *Laboratoire Lagrange, Observatoire de la Côte d'Azur*. As every year, this meeting included the general assembly of our society, plenary sessions aimed at a large audience of professionals, workshops dedicated to various scientific issues, the young researcher and thesis prize ceremony, events for schools and the public, discussions concerning societal subjects. The audience was the most important ever.

The programme of the plenary sessions was, as usual, very rich, with several high-quality presentations proposed by the various *Programmes Nationaux* and *Actions Spécifiques* of INSU-CNRS, covering a broad range of astrophysical topics, including Virtual Observatory, laboratory experiments, XMM-Newton, plasmas, stellar physics, planetology, astrobiology, numerical methods, new results with SPHERE and GRAVITY and current and future observing facilities such as SPIRou/CFHT and ELT. Representatives of institutions (G. Perrin for INSU, P. Laudet for CNES), the CNU (V. Buat), and the "sections" of CNRS (B. Mosser) and CNAP (H. Wozniak) presented us a detailed view of the French research situation with crucial informations for the career. Our colleague T. Montmerle presented the history and the role of IAU, for which the SF2A is the link with the French community. The last talk of the plenary session was given by T. Mondavaine on behalf of the Société Astronomique Française presenting the status of the fruitful amateur-pro collaborations. A parallel session about Professionals-amateurs collaborations was held for the second year on the last day. Like every year, SF2A had invited a "foreign" astronomical society. Dr A. Mastichiadis presented the Hellenic Astronomical Society.

The impact of Astrophysics on the global warming that our planet is unfortunately experiencing is non-negligible and our community has slowly begun some introspection. The SF2A meeting was an excellent opportunity to discuss it for the first time. P. Martin, on behalf of several persons, was presenting during the plenary session a study conducted among our community and existing actions. A passionate debate followed.

Afternoons were dedicated to parallel workshops covering all branches of astronomy. These workshops were selected among propositions from the *Programmes Nationaux* and *Actions Spécifiques*, but also from individual members of the society. These workshops thus covered the interests of our whole community, in good accordance with the topicality of the field.

Finally, the SF2A journées were concluded by our general assembly where the moral and financial reports were presented. A vote from the members has complemented these presentations in July 2019.

Several special moments usually illuminated the SF2A meeting. The first one was the "outreach" conference by A. M. Lagrange about exoplanets. The second one was the SF2A prize ceremony. The laureate of the Thesis prize was Martin Turbet who presented his brilliant work concerning planet habitability, applied to early Mars. The laureate of the young researcher prize was Sébastien Deheuvels for his work on stellar physics using asteroseismology. This ceremony was followed by a dinner-cocktail. An important moment of the week was also the School project prize called "Découvrir l'Univers". Last but not least, we spent a wonderful thursday evening at the historical site Mont Gros of Observatoire de Nice with an impressive dinner and an unforgettable concert of the Watermelons, led by our vice-president!

Several sponsors made this meeting possible. The organizers and myself are very grateful for the financial help of INSU-CNRS, CNES, the *Service d'Astrophysique du CEA/DSM/IRFU*, the *Observatoire de la Côte d'Azur*, the *Laboratoire Lagrange*, the Université de Côte d'Azur, the Région Sud Provence Alpes Côte d'Azur and the PN and AS of INSU-CNRS that have supported the organization of the workshops. We acknowledge the help of the *Laboratoire Lagrange* and the Observatoire de la côte d'Azur for the global organization and the *Université Côte d'Azur* for its conference site at Campus de St Jean d'Angely. I would like to thank all the members of the SF2A board who were all very active for preparing the meeting, and end with the local organizing committee:

Eric Lagadec (chair)

Benoît Carry

Aurélien Crida

Orlagh Creevey

Christine Delobelle

Patrick de Laverny

Clémence Durst

Vanessa Hill

Georges Kordopatis

Héloïse Méheut

Mamadou N'Diaye

Sophie Rousset.

They all made this meeting a success. In addition to the rich program mentioned above (and somewhat detailed in these proceedings), embracing all of the astronomy research performed in France, the work of the LOC has also offered to all the participants many opportunities to meet and discuss beyond the limits of their own field of expertise.

See you next year in Paris!

Fabrice Herpin, President of the SF2A