

Report of the C20 Commission on Computational Physics

Commission members

Chair	David P. Landau	United States
Vice-Chair	Mei-Yin Chou	China (Taipei)
Secretary	Lev Shchur	Russian Federation
Member	Richard Liska	Czech Republic
Member	Xiaoqun Wang	China (Beijing)
Member	Priya Mahadevan	India
Member	Regina Maphanga	South Africa
Member	Georg Kresse	Austria
Member	Andrew Horsfield	United Kingdom
Member	Maria-Roser Valenti	Germany
Member	Laurette Tuckerman	France
Member	Suklyun Hong	Korea
Member	Daniel Vizman	Romania
Member	Yuan Ping Feng	Singapore

Associate Members

Hai-Qing Lin	China
Joan Adler	Israel
Bismarck Costa	Brazil
Travis Humble	U.S.A.

Commission Member Term Extensions

Due to the cancellation of the 2020 IUPAP General Assembly, C20 Commission members were polled to determine if they wished to extend their term of service for one more year or be replaced. All Commission members agreed to a one-year extension.

XXXII IUPAP International Conference on Computational Physics CCP2020

Due to the COVID-19 pandemic, the XXXII IUPAP International Conference on Computational Physics CCP2020 which was scheduled to be held in Coventry, UK from Aug.2-6, 2020 was canceled. Via an intense e-mail exchange that included Dr. Martin Weigel, Chair of CCP2020, and Prof. Renata Wentzcovitch, Chair of CCP2021 in Austin, Texas, the C20 Commission explored the possible options for proceeding with the conference series. The final resolution was that the XXXII IUPAP International Conference on Computational Physics be held in Coventry, UK in early August, 2021 as CCP2021, and CCP2022 will be in Austin, TX U.S.A. Proposals for CCP2023 should be submitted by next May so that there is time to distribute them to all C20 Commission members and obtain feedback. Presentations and a vote will be taken at the C20 Commission meeting at CCP2021.

2020 Young Scientist Prize in Computational Physics

The winner of the 2020 IUPAP Young Scientist Prize in Computational Physics was Prof. Zhijun Wang (Chinese Academy of Sciences, Beijing) awarded by the C20 Commission on Computational Physics.

The Citation for the award is:

For the discovery of the first Dirac semimetal material Na₃Bi and the topological material search based on topological quantum chemistry

Normally, the medal and certificate would have been presented at the XXXII IUPAP International Conference on Computational Physics CCP2020; however, CCP2020 was canceled due to the COVID-19 pandemic. Instead, the prize will be presented at CCP2021 to be held in Coventry, UK

Inclusion of Virtual Components in Future Conferences

The COVID-19 pandemic has forced changes upon us in many of our professional practices, including the rapid increase in the number of virtual classes, meetings, and conferences. The C20 Commission discussed the potential for use of increased teleconferencing in future scientific conferences, even post-pandemic. While current technology certainly has its limitations, and face-to-face interactions are particularly important for young scientists, modern teleconferencing has unfulfilled promise. The potential for including participants who could otherwise not attend conferences or who would only like to participate peripherally and would not like to travel, or inclusion of seminal presentations by leaders in the field who might not be inclined to travel to a conference, are examples of how imaginative use of teleconferencing might enhance conference organization. The C20 Commission proposes that this important topic be part of the IUPAP Strategic Plan.

Respectfully submitted,
David P. Landau
Chair, C20 Commission
September, 2020