#### **DIVISION J**

#### PRESIDENT VICE-PRESIDENT ADVISOR

STEERING COMMITTEE

President Comm. J1 President Comm. J2 President Comm. J3 President Comm. X1 Nikolaos D. Kylafis Celine Peroux Denis Burgarella Christine Jones

Kim-Vy Tran

Cristina C. Popescu

Denis Burgarella

#### DIVISION J COMMISSIONS

Div. J / Commission J1	Galaxy Spectral Energy Distributions (Inter-Division D-G-H-J)
Div. J / Commission J2	Intergalactic Medium (Inter-Division B-H-J)
Div. J/ Commission J3	Galaxies at the Epoch of Reionisation
Div. J / Commission X1	Supermassive Black Holes, Feedback and Galaxy Evolution (Cross-Division D-J)
Div. J / Commission H4	Stellar Clusters throughout Cosmic Space and Time (Inter-Division G-H-J)

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# GALAXIES AND COSMOLOGY

Gustavo R. Bruzual, Barbara Catinella, Johan H. Knapen, Lucia Marchetti, Laurence Tresse, Aida Wofford

GALAXIES AND COSMOLOGY

# Annual REPORT 2021–2022

Division J continues to promote research, education and outreach on topics related to the physics of the Universe and of galaxies beyond the Milky Way. The main themes of the Division are: physics and content of the Universe, evolution of structures, formation and evolution of galaxies, spatially resolved galaxies, science and data analysis methods for extra-galactic and cosmological surveys. Division J connects across many of the other Divisions and has strong overlap with Div B, Div D, Div G and Div H.

To date, the Division has 3752 active members, of which 271 are junior members. The scientific goals of the Division continue to be supported by its previous Commissions: Inter-Division D-G-H-J Commission J1 "Galaxy Spectral Energy Distributions", Inter-Division B-H-J Commission J2 "Intergalactic Medium", as well as by the Cross-Division D-J "Supermassive Black Holes, Feedback and Galaxy Evolution", and the affiliated Inter-Division G-H-J Commission H4 "Stellar Clusters throughout Cosmic Space and Time". In addition, a new Commission has been founded in 2021: Commission J3, "Galaxies at the Epoch of Reionisation". Its founding President is Denis Burgarella, and the Vice-President is Laura Pentericci. The Commission already has 92 members.

The new term started with the organisation of Division J under the new President Kim-Vy Tran. The President organises monthly Zoom meetings and distributes relevant documents on a share-drive that is open to the members of the Steering Committee for editing when needed.

The Division has revised its webpage and discussed scientific priorities for the new term. Lucia Marchetti volunteered to be Secretary of the Division in October 2021.

A main activity at the end of 2021 was to read and advise on the Letters of Intent for the IAU Symposia for 2023, and, subsequently, to write letters of support for the applications considered of interest to the Division. The Division also ranked the final proposals for the 2023 IAU Symposia. Our Division actively supported and recommended the organisers of IAU meetings to observe and implement the rules of the IAU with respect to geographic, gender, age and ethnicity balance, and to support inclusion and diversity. We also recommended and encouraged support for hybrid meetings, with both face-to-face and virtual attendance.

Another major activity was to review the applications for the IAU PhD prize for 2021. We are in the difficult process of selecting a winner among the outstanding nominees, and we continue to be inspired by the innovative research being led by the next generation of astronomers. In addition to the PhD Prize winner for Division J, we will recognise Honorable Mentions. We look forward to having recent IAU PhD Prize winners give talks at the General Assembly in Busan.

Because the IAU XXXI General Assembly in Busan has been rescheduled for 2022, we have been in the unusual situation of having to organise the Division Day at the begining of the term, in addition to the one at the end of the term. We have started the discussions in the first Zoom meeting of the Division, and this has been a major topic on the agenda ever since. We have confirmed six science talks for the Division Meeting and will review submitted abstracts to select contributed talks. We expect have a complete schedule for the Division Meeting by June 2022.

In February 2022, the Division J Steering Committee expressed great concern for the events unfolding in Ukraine and welcomed the decision of the IAU for providing an official statement of support for the Ukrainian colleagues. We stand in solidarity with our international community and encourage members to support colleagues across the globe during this difficult time.