RESEARCH HIGHLIGHTS

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In the news



More than 1,700 planetary scientists from 52 countries gathered in Geneva, Switzerland, in September for the joint meeting of the Europlanet Society's European Planetary Science Congress (EPSC) and the meeting of the Division for Planetary Sciences (DPS) of the American Astronomical Society. This was the third time that these major European and American planetary conferences were organized together. EPSC-DPS2019 covered all of planetary science and technology, across parallel sessions on terrestrial planets, outer planet systems, missions, instrumentation and techniques, small bodies, exoplanets and origins and 'Outreach, Diversity, Amateur Astronomy'. Over 1,900 abstracts were submitted. "I was pleased and excited that the EPSC-DPS was able to display the diverse range of topics within planetary science, as well as its relationship with other areas of science," says Maria Cristina De Sanctis, chair of the EPSC scientific organizing committee.

The latest results of ongoing space missions to small bodies and planets were covered in dedicated sessions. Scientific highlights included presentations on the impact experiment on asteroid Ryugu that resulted in a crater much larger than expected; particles ejected from asteroid Bennu; aurorae, lightning flashes and the magnetic field of Jupiter; activity and surface modifications of comet 67P; habitability of ancient Venus and Venus-like exoplanets; orbital simulations showing how Centaurs — small icy objects that orbit between Jupiter and Neptune — become comets; and formation, evolution and impact processes of small bodies via numerical modelling. The results of the asteroid missions showed the necessity of testing planetary defence strategies. Throughout the week, presentations emphasized the importance of sample return missions and visiting gas giants. Machine learning and citizen science also garnered wide coverage.

The programme also included talks from winners of EPSC and DPS prizes, and approximately 40 topical workshops and splinter sessions that provided a venue for the scientific and technological discussions and introduction of various data, archives, analysis tools, education and more. "Planetary science gathers together different scientific disciplines and techniques and we were delighted to see how researchers with different background and expertise work in a collaborative and fruitful way," says De Sanctis. The next joint EPSC-DPS meeting will take place in London, Canada, in 2022. Until then, both conferences will continue with their annual schedules. *Nilda Oklay-Vincent, Associate Editor*, Nature Communications