

**R009-01**

**B会場 : 11/24 PM1 (13:15-15:15)**

**13:15~13:30**

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## **Updated Status of BepiColombo and Overview of Mercury Flyby Observations**

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The ESA-JAXA joint mission BepiColombo is now on the cruise to Mercury. The BepiColombo mission consists of two spacecraft, Mio (Mercury Magnetospheric Orbiter: MMO) and Mercury Planetary Orbiter (MPO). The 7-years interplanetary cruise of BepiColombo covers the heliocentric distance range of 0.3-1.2 AU and also includes 9 planetary flybys: once at the Earth, twice at Venus, and 6 times at Mercury. Even before arrival, we already obtained fruitful science data from Mercury during three Mercury flybys completed on 1 October 2021, 23 June 2022, and 19 June 2023. We performed science observations with almost all the instruments onboard Mio and successfully obtained comprehensive data of Mercury's magnetosphere such as magnetic fields, plasma particles, and waves. The fourth Mercury flyby is scheduled on 4 September 2024 and its trajectory is quite different from those of the first three flybys. Here we present the updated status of BepiColombo, initial results of the science observations during the Mercury flybys, and the upcoming operations plans.