



Interior Studies with BepiColombo's MPO

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NASA's MESSENGER mission has fundamentally changed our view of the innermost planet. Mercury is in many ways a very different planet from what we were expecting. Now BepiColombo has to follow up on answering the fundamental questions that MESSENGER raised and go beyond.

BepiColombo is a joint project between ESA and the Japanese Aerospace Exploration Agency (JAXA). The Mission consists of two orbiters, the Mercury Planetary Orbiter (MPO) and the Mercury Magnetospheric Orbiter (MMO). The mission scenario foresees a launch of both spacecraft with an ARIANE V in October 2018 and an arrival at Mercury in 2025. From their dedicated orbits the two spacecraft will be studying the planet and its environment.

The MPO scientific payload comprises eleven instruments/instrument packages; several of them dedicated to the study of the interior. Together, these instruments will perform measurements to enhance our knowledge of the planets figure and internal structure and composition. Expected results will provide further clues to the origin and evolution of a planet close to its parent star.

In this presentation we will give an overview on the expected science return of BepiColombo with respect to the interior. In addition we give a brief update on the latest development status of the mission.

All scientific instruments have been integrated into the spacecraft and both spacecraft are now under final acceptance testing.