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The BepiColombo MPO Payload

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The BepiColombo scientific payload has been officially approved for both spacecraft, the Mercury Planetary Orbiter (MPO) and the Mercury Magnetospheric Orbiter (MMO). The MPO payload comprises 11 instruments/instrument packages; the MMO payload consists of 5 instruments/instrument packages. Together, the scientific payload of both spacecraft will provide the detailed information necessary to understand Mercury and its magnetospheric environment and to find clues to the origin and evolution of a planet close to its parent star. The MPO will focus on a global characterization of Mercury through the investigation of its interior, surface, exosphere and magnetosphere. In addition, it will be testing Einstein's theory of general relativity. Major effort was put into optimizing the scientific return by defining the payload complement such that individual measurements can be interrelated and complement each other. A detailed overview of the status of BepiColombo will be given with special emphasis on the MPO and its payload complement.