In-Situ Multi-Spacecraft and Remote Imaging Observations of the First CME Detected by Solar Orbiter and BepiColombo

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On April 19th 2020 a CME was detected by Solar Orbiter at a heliocentric distance of 0.8 AU and was also observed in-situ on April 20th by both Wind and BepiColombo. During this time, BepiColombo had just completed a flyby of the Earth and therefore the longitudinal separation between BepiColombo and Wind was just 1.4°. The total longitudinal separation of Solar Orbiter and both spacecraft near the Earth was less than 5°, providing an excellent opportunity for a radial alignment study of the CME. We use the in-situ observations of the magnetic field at Solar Orbiter with those at Wind and BepiColombo to analyse the large-scale properties of the CME and compare results to those predicted using remote observations at STEREO-A, providing a global picture of the CME as it propagated from the Sun to 1 AU.

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