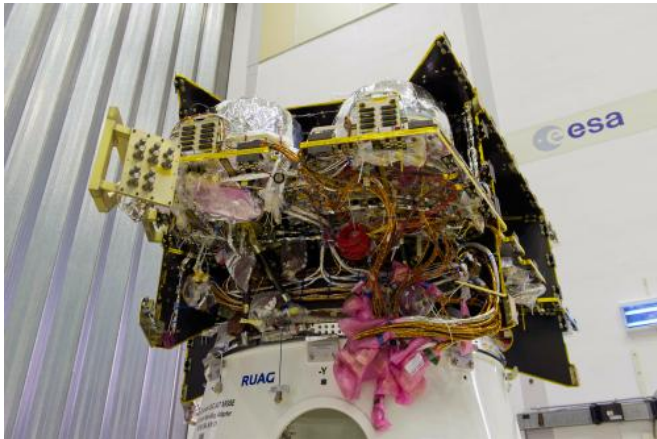


Image: Inside BepiColombo's mercury transfer module

3 October 2014



BepiColombo stack, next to ESA's Mercury Planetary Orbiter, which will be attached in turn to JAXA's Mercury Magnetospheric Orbiter.

[BepiColombo](#) is due to be launched by Ariane 5 from Europe's Spaceport in French Guiana in 2016.

Provided by European Space Agency

Credit: ESA—A. Le Floc'h

This labyrinth of power, data and propellant lines is found inside the Mercury Transfer Module, the powerful haulage vehicle tasked with transporting ESA's BepiColombo mission on its 7.5-year journey to the innermost planet.

This is the [flight model](#), which will be among the attractions on show at Sunday's ESTEC Open Day. The two wrinkled-looking silver spheres are [propellant tanks](#).

The main challenge of flying to Mercury is to slow down enough to fall into the Sun's gravitational pull, the strength of which grows with proximity.

The module will use a combination of chemical and electric thrusters to make the trek, interspersed with gravity-assist swingbys of Earth, Venus and Mercury itself.

A pair of solar wings, adding up to 33 sq m in total, will generate the power needed to keep the electric thrusters firing.

The module will sit at the bottom of the

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