Twitter Thread by ESA Science

ESA Science
@esascience

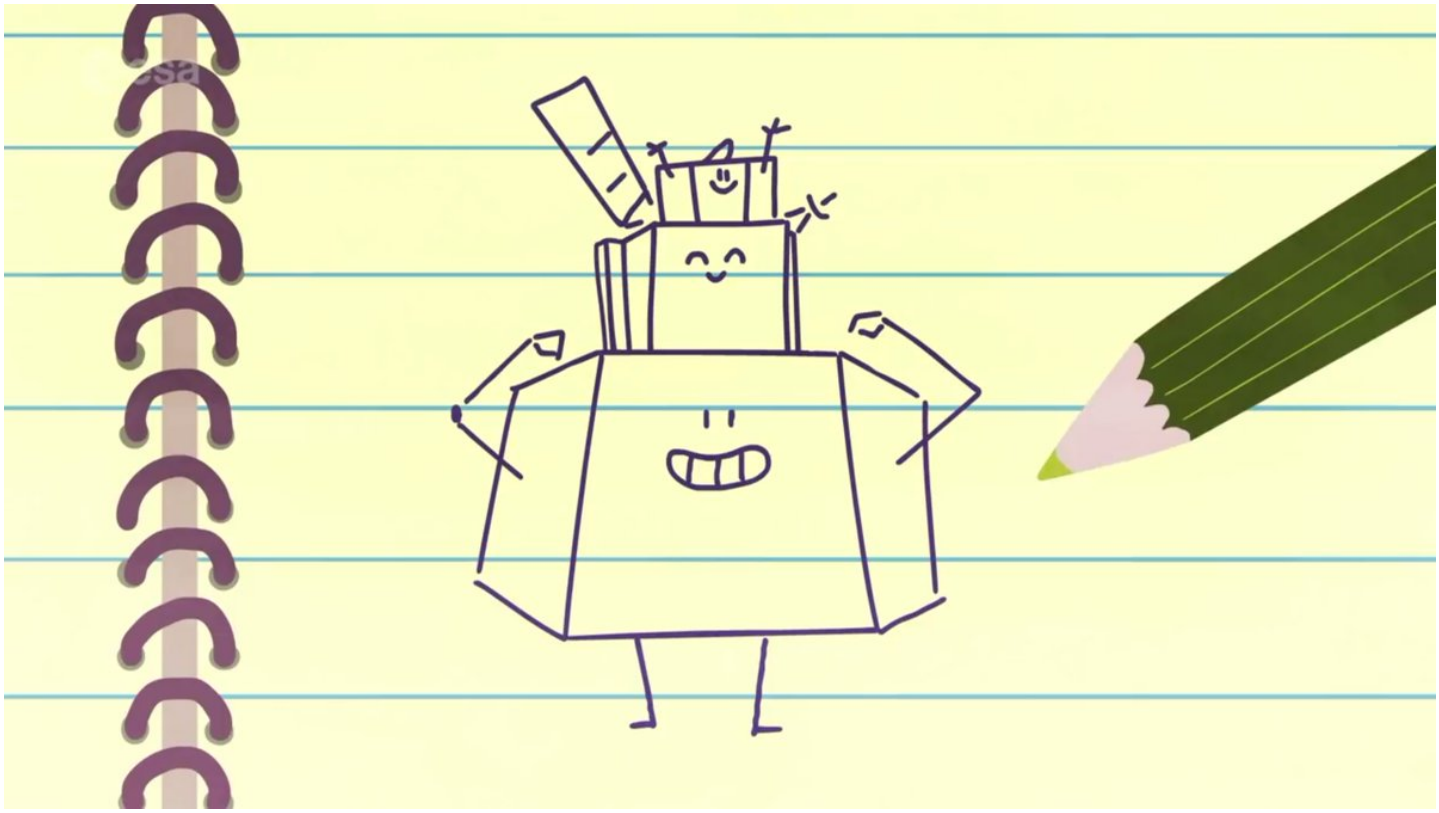
Greetings from @ESA's operations centre in Germany, where we're following the launch of #BepiColombo together with mission experts. The spacecraft are on the launch pad at Europe's #Spaceport in Kourou & in just over 1 hour will blast off into space. Destination: planet #Mercury

#BepiColombo is a collaboration between @ESA and @JAXA_en to explore the innermost planet in our Solar System. For a primer on #Mercury and the mission, here's a useful thread ■
https://t.co/eagfXx3eDz

Why go to #Mercury, you wonder? \U0001f914
Because it's a planet full of mysteries! \U0001f9d0

> The #science themes of #BepiColombo range from its surface and interior to its exosphere and magnetic field, and even include tests of Einstein's general relativity \u2b07\ufe0f\u27a1\ufe0f https://t.co/LunXnrMAew pic.twitter.com/89AHKcExMH
>
> — ESA Science (@esascience) October 18, 2018

And for a unique "first-person" account, follow the three spacecraft accounts: @ESA_Bepi, @JAXA_MMO & @ESA_MTM



https://t.co/Qek2GqelXp

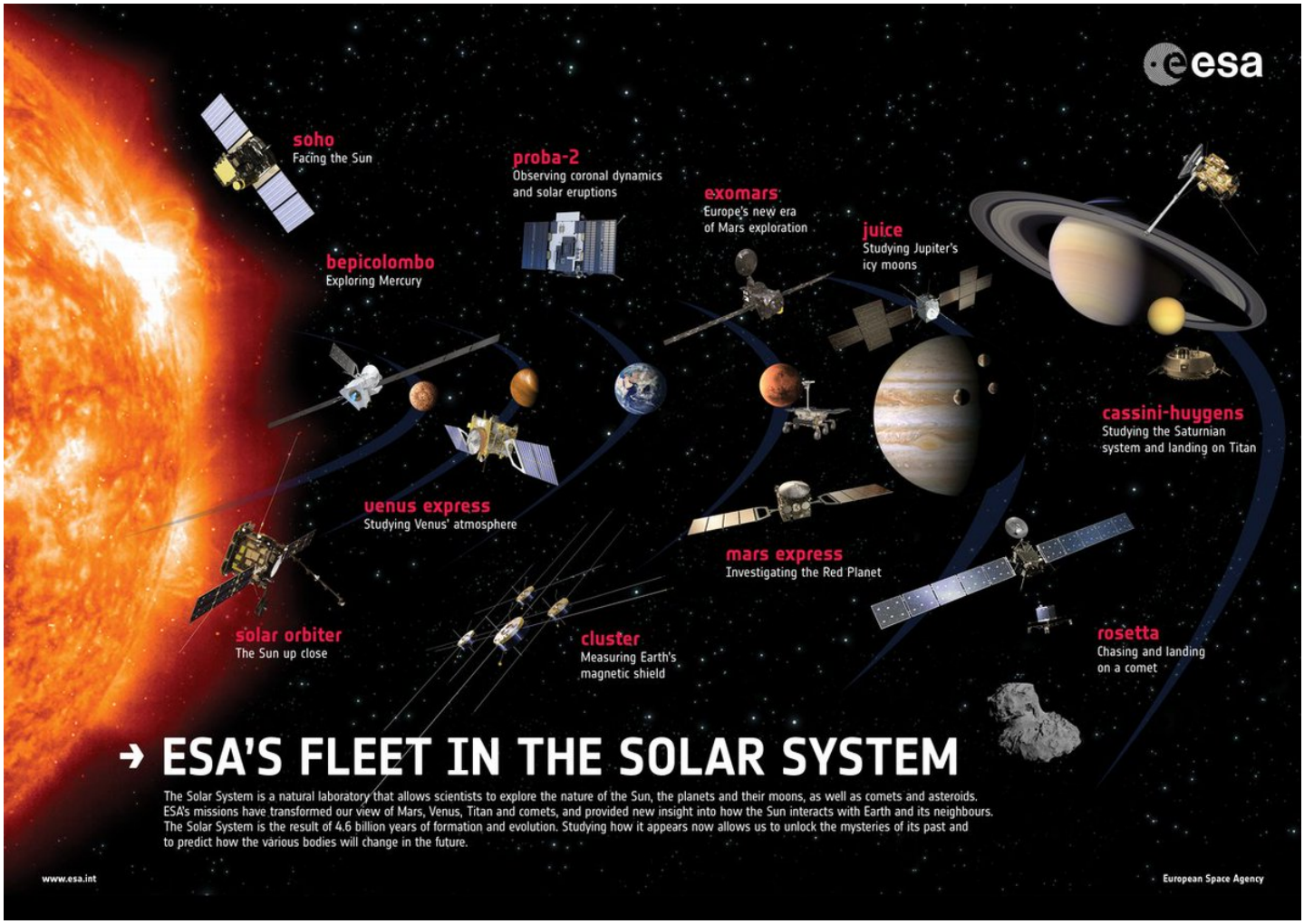
> Have you ever found yourself in such a surreal situation that you can hardly believe it\u2019s real? I\u2019m currently waiting to be shot into #space by one of humankind's biggest rockets, the mighty #Ariane5. Perfectly normal day, right? #BepiColombo https://t.co/PiENsBc47D pic.twitter.com/j1PAthyTkQ
>
> — Bepi (@ESA_Bepi) October 20, 2018

NOW! Join us for #live coverage of the #BepiColombo launch, from Europe's Spaceport in Kourou, French Guiana. Liftoff with an #Ariane5 rocket is set for 01:45 GMT (03:45 CEST)

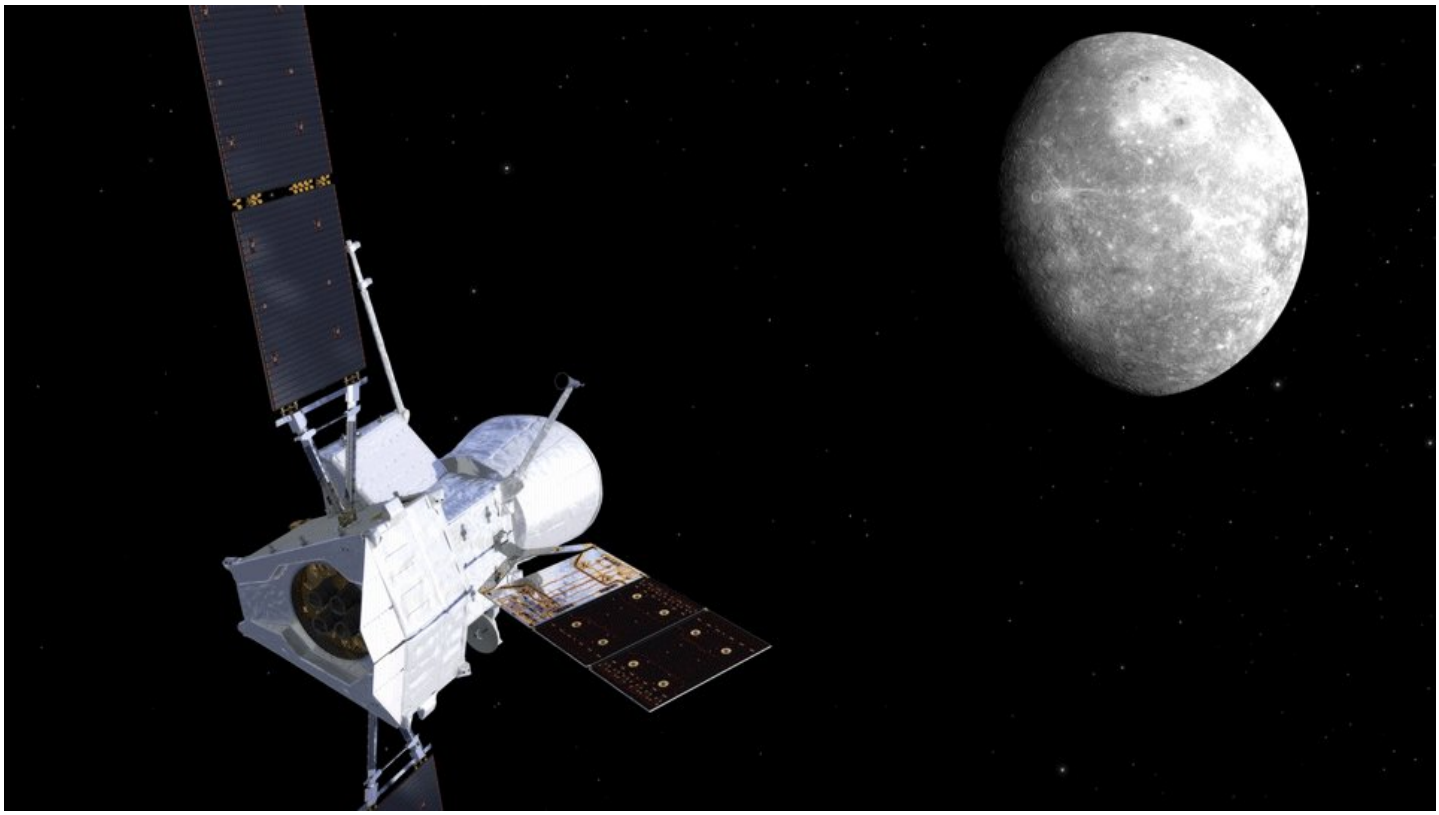
■ https://t.co/Z1mcQc6u1U

Meanwhile, at @ESA's operations centre, #BepiColombo deputy project scientist, Joe Zender, @ESA research fellow Joana Oliveira and #INAF researcher Roberto Peron are discussing aspects of @ESA_Bepi #science with #media representatives

Why go to #Mercury? The question we're all interested is actually about Earth and life in general: how did it start? To address this question, we have to understand the formation & evolution of our Solar System, so we send spacecraft to explore planets & investigate #BepiColombo

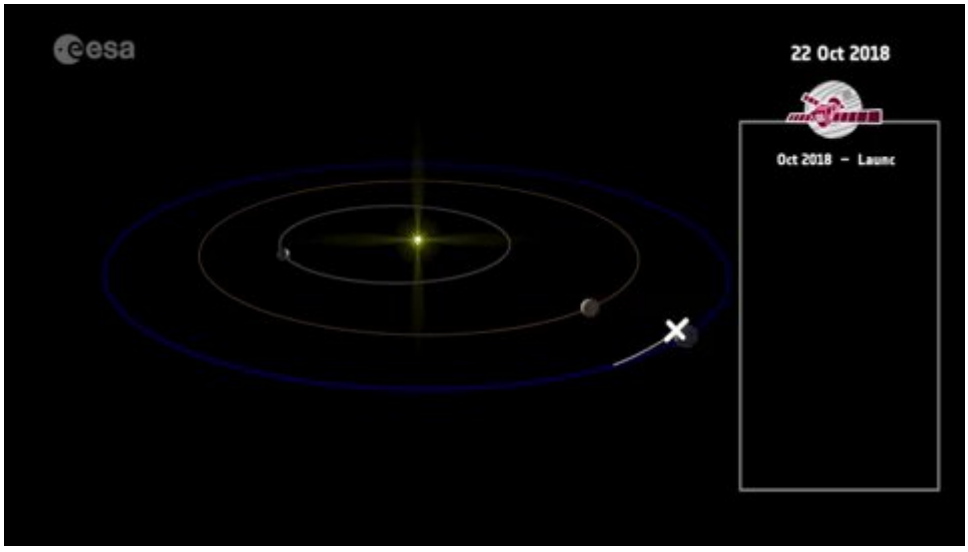


"We have a problem with #Mercury..." because it’s falling out of our overall understanding of the Solar System. We don't understand how such a planet could have formed and evolved, so we not only need to send outstanding instruments there: we send a full laboratory #BepiColombo



Now Prof Ayako Matsuoka from @JAXA_en and the Institute of Space and Astronautical Science (ISAS), Japan, explains the details about @JAXA_MMO #science and how it will work together with @ESA_Bepi to study another of #Mercury's mysteries: its magnetic field

Fifteen minutes to liftoff! Then #BepiColombo will start its 7-year journey to #Mercury, using solar-electric propulsion + a total of 9 flybys before reaching the planet in late 2025, as explained by Amedeo Rocchi from @esaoperations flight dynamics ■



■ #BepiColombo
https://t.co/xfOwnIxBBw

> All green ahead of the launch of #BepiColombo from Europe's Spaceport in French Guiana. Liftoff at 01:45 GMT (03:45 CEST)
> Follow live: https://t.co/JVwQjT07a5 pic.twitter.com/3qCNcGB8e1
>
> — ESA (@esa) October 20, 2018

https://t.co/Ryoa4R53AH

> #BepiColombo GO \U0001f44d This is it! Next stop: #space! \U0001f62f pic.twitter.com/iCJVUZTrsN
>
> — Bepi (@ESA_Bepi) October 20, 2018

https://t.co/YyIq81afko

> Go! \u3055\u3042\u3001\u884c\u3053\u3063\u304b\uff01 pic.twitter.com/onflIIj7MC
>
> — \u307f\u304a (MIO) (@JAXA_MMO) October 20, 2018

https://t.co/HzCj5Sur0b

> pic.twitter.com/vHv3fblW3L
>
> — MTM (@ESA_MTM) October 20, 2018

Liftoff! #BepiColombo

https://t.co/N9bXqwZtv7

> SPACECRAFT SEPARATION! Its job done, the #Ariane5 releases #BepiColombo so it can begin its journey to #Mercury \U0001f6f0\ufe0f\U0001f311 pic.twitter.com/NZpVH9cfj4
>
> — ESA Operations (@esaoperations) October 20, 2018

Relive the moments of #BepiColombo liftoff while we wait for acquisition of signal...
https://t.co/IwFB9bEce6

https://t.co/7MkJbvE6SN

> Brief signal observed from the tracking station at #Malindi. We're still awaiting AOS over #NewNorcia in a few minutes but looking good so far
>
> — ESA Operations (@esaoperations) October 20, 2018

■ #BepiColombo
https://t.co/dyjGcQc1E6

> FIRST SIGNAL RECEIVED\U0001f4f6 from #BepiColombo\U0001f6f0\ufe0f, detected by @ESA's antenna at #NewNorcia, Australia\U0001f4e1.
> With these first words\U0001f4e3, engineers at #ESOC\U0001f579 can monitor the status & execution of the autonomous activities onboard the spacecraft pic.twitter.com/JkY4ppgAOC
>
> — ESA Operations (@esaoperations) October 20, 2018

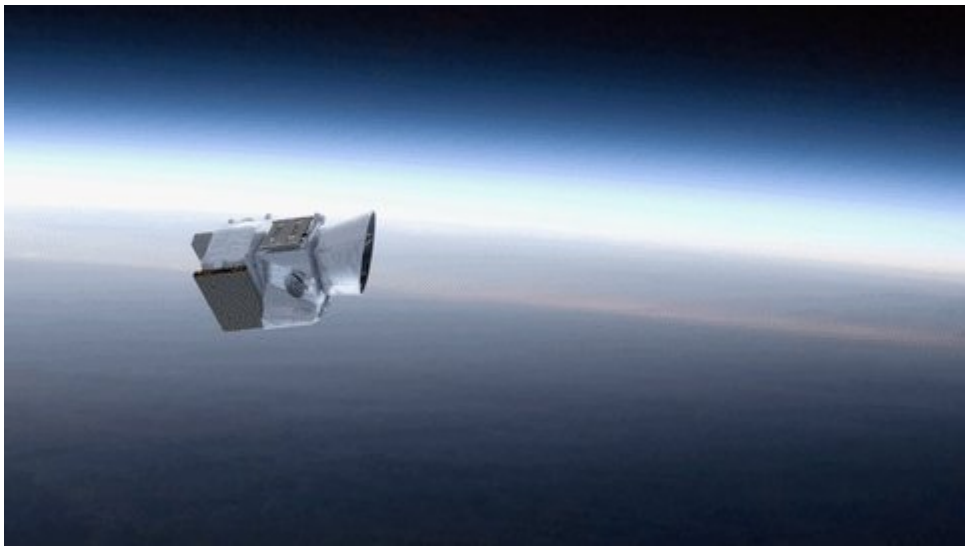
https://t.co/nxIvBJCpYw

> Testing, testing, is this thing on?! \U0001f3a4\U0001f4fb\U0001f39a Sending first signals from space back to mission control \U0001f508\U0001f509\U0001f50a #bepicolombo
>
> — Bepi (@ESA_Bepi) October 20, 2018

https://t.co/7fUkCQVLFi

> Solar arrays are deployed! Well done @ESA_MTM #BepiColombo https://t.co/49kdLXDEkn
>
> — ESA (@esa) October 20, 2018

We know from telemetry that the #BepiColombo solar arrays have been deployed, but stay tuned for a #SpaceSelfie later today by @ESA_MTM ■



@ESA_MTM Following this morning's launch ■■■ our mission teams are still busy with many #BepiColombo activities, so keep following @esaoperations @ESA_Bepi @ESA_MTM @JAXA_MMO for updates over the weekend https://t.co/2VTAANwMmK

> First star tracker switched on! #BepiColombo\U0001f6f0\ufe0f can now work out its orientation in space \u2728\U0001f31f
>
> — ESA Operations (@esaoperations) October 20, 2018

Thanks to all of you for joining this evening / night / morning to follow the launch of our #BepiColombo mission to #Mercury ■
#ICYMI Watch the full replay
■ https://t.co/F4YbBXN8ci