

# Juice's odyssey of exploration: Jupiter's icy moons

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Credit: ESA/ATG medialab

A grand odyssey of exploration is about to begin. Humankind's next bold mission to the outer solar system, ESA's Jupiter Icy Moons Explorer, Juice, is poised to explore giant planet Jupiter and its largest moons. These intriguing worlds have piqued our curiosity ever since Galileo first raised his telescope to the planet and discovered its four largest moons: Io, Europa, Ganymede and Callisto, three of which are thought to harbor underground oceans.

Early space probes visiting the Jovian system have raised more questions than answers. But thanks to Juice, many of those answers are now within reach. ESA is launching the spacecraft in April 2023 on an eight-year journey to the distant planet.

To uncover the hidden secrets of these mysterious worlds, Juice is equipped with the most powerful science instruments ever sent to the [outer solar system](#). The spacecraft will face many dangers along the way: radiation, [extreme temperatures](#), and the vast gravitational pull of Jupiter, all while operating hundreds of millions of kilometers from Earth. But in the safe hands of ESA's operators to guide it safely through these challenges, the dangers will be worth it for the science that Juice is destined to uncover.

Provided by European Space Agency

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