

Patrick Michel

Biography:

Dr. Patrick Michel is an international expert of asteroids born in the famous village Saint-Tropez (France) who was awarded the Carl Sagan Medal by the Division of Planetary Science of the American Astronomical Society for Excellence in Public Communication in Planetary Science. He is Director of Research at CNRS (French Scientific Research National Center) and leads the Planetology team of the Lagrange laboratory at the Côte d'Azur Observatory (Nice, France). He is also Global Fellow (Professor with a foreign permanent affiliation) of the University of Tokyo (Japan). With more than 220 publications in international peer-review journals (including the covers of the journals Nature and Science), he develops numerical simulations of the impact process between asteroids, which reproduced for the first time real asteroid families, and of their surface and interior in their low-gravity environment. He is the Principal Investigator (PI) of the ESA Hera mission (launch in 2024), which contributes to the first asteroid deflection test with the NASA DART mission by investigating the binary asteroid target and the impact outcome of the DART spacecraft in great details. He is co-coordinator of the AIDA cooperation in support of both DART and Hera missions. He is co-PI of the CNES-DLR rover onboard the Phobos sample return mission MMX (JAXA, launch in 2024), which will be the first rover to be deployed and rove on the surface of a Martian moon (Phobos) to investigate its surface properties. He is Co-Investigator of the two asteroid sample return space missions, Hayabusa2 (JAXA) and OSIRIS-REx (NASA). He is also coordinating the NEO-MAPP project funded by the H2020 program of the European Commission to study asteroid deflection and space instrumentations. He is the lead Editor of the book Asteroids IV (University of Arizona Press, 2015, 150 authors), which provides the most comprehensive review of asteroid knowledge. He is the President of the Near-Earth Object Working Group of the International Astronomical Union (IAU) and a member of the Steering Committee of the International Asteroid

Warning Network (IAWN). In addition to the Carl Sagan Medal, he was awarded the NASA Silver Achievement Medal, the NASA OSIRIS-REx Group Achievement Award, the Prize Paolo Farinella 2013 for his contribution to our understanding of the collisional process, the Prize Young Researcher of the French Society of Astronomy and Astrophysics (SF2A) and the Gold Medal of the City of Nice. He is science advisor and part of many documentaries on asteroids, including the documentary "Asteroid Rush" (Saint-Thomas Production) that was awarded 8 Prizes in 2022-2023. He also greatly enjoys working with Dr. Sir Brian May and Claudia Manzoni on stereoscopic images of asteroids and related numerical simulations. The asteroid (7561) Patrickmichel is named after him (IAU official name).