Lauréate du Prix Holweck (IOP et SFP) 2018 : Marina Galand en quelques mots

Marina Galand's research activities focus on the deposition of energy sources in planetary atmospheres in the Solar System and beyond. These sources include solar radiation and particles from magnetised environments. In particular, Marina Galand has developed sophisticated kinetic and fluid models of the plasma created and perturbed by these sources; she has used these models in an original way as binding elements between multi-instrumental datasets from international space missions (e.g., Cassini, Venus Express, Rosetta) in order to enhance the science return. She has focused so far on Venus, Earth, and Mars, Jupiter and its moon Ganymede generating its own magnetic field, Saturn and its moon Titan holding a thick and organic-rich atmosphere, comets sublimating nearly-pristine material from when the Solar System was formed, and gas-giant exoplanets orbiting other stars.

Marina Galand is currently a Reader at the Department of Physics at Imperial College London, UK. She did her PhD at the "Université Joseph Fourier" (now Université Grenoble Alpes) on the Earth's high-latitude upper atmosphere. She then worked in the US for 10 years, including at the National Center for Atmospheric Research (NCAR) and the National Oceanic and Atmospheric Administration (NOAA) in Boulder, CO, and at the Center for Space Physics at Boston University, MA. After moving to the UK, she has been leading research in planetary atmospheres. Her current collaborations in close link with ESA and NASA space missions (e.g., Rosetta, Cassini, JUICE) extend primarily over Europe and the US. Her research has been rewarded by the Zeldovich Medal from COSPAR (2006) and the Fernand Holweck Medal and Prize from the IoP and SFP (2018).