

Worlds Fantastic, Worlds Familiar

A Guided Tour of the Solar System

Join Bonnie J. Buratti, a leading planetary astronomer, on this personal tour of NASA's latest discoveries. Moving through the Solar System from Mercury, Venus, Mars, past comets and asteroids, and the moons of the giant planets, to Pluto, and on to exoplanets, she gives vivid descriptions of landforms that are similar to those found on Earth but that are more fantastic. Sulfur-rich volcanoes and lakes on Io, active gullies on Mars, huge ice plumes and tar-like deposits on the moons of Saturn, hydrocarbon rivers and lakes on Titan, and nitrogen glaciers on Pluto are just some of the marvels that await you. Discover what it's like to be involved in a major scientific enterprise, with all its pitfalls and excitement, from the perspective of a female scientist. This engaging account of modern space exploration is written for non-specialist readers, from students in high school to enthusiasts of all ages beyond.

BONNIE J. BURATTI is a Senior Research Scientist at NASA's Jet Propulsion Laboratory, California Institute of Technology. With expertise on icy moons, comets, and asteroids, she holds degrees from MIT and Cornell University. She is currently serving on the *Cassini* and *New Horizons* science teams, and is the US Project Scientist for *Rosetta*. She is a past Chair of the Division for Planetary Sciences of the American Astronomical Society, and advises NASA. The author of over two hundred scientific papers, Buratti was awarded the NASA Exceptional Achievement Medal and the International Astronomical Union named asteroid 90502 "Buratti" in recognition of her work.

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California Institute of Technology*



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This book is dedicated to my parents
Ralph Julius Buratti (1920–2008)
Hildegarde Mahala Singles Buratti (b. 1922)

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