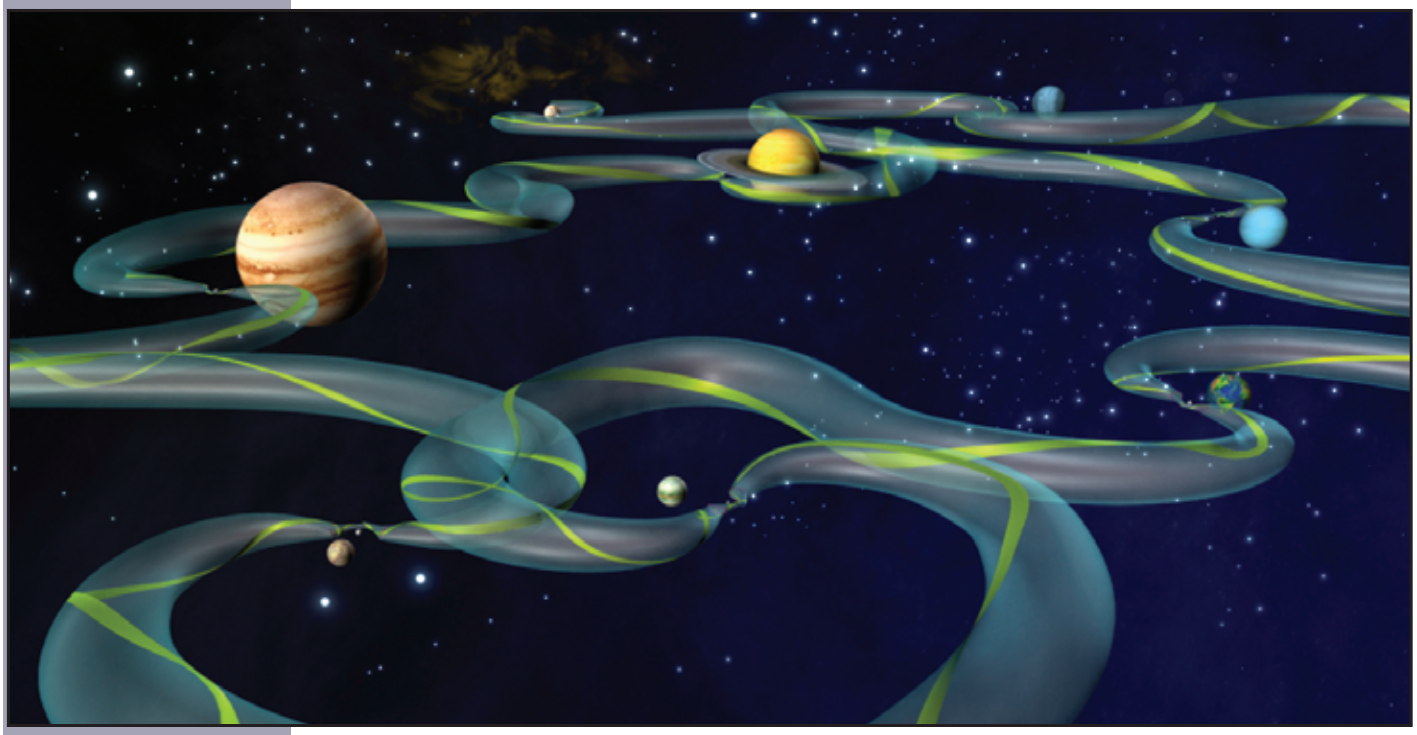
Boldly Going

The "tubes" below are illustrations of low-energy pathways along which space vehicles can travel using far less fuel. The recent discovery of these pathways has made previously impossible missions feasible. Much of space travel depends on calculus, trigonometry, and vector analysis, but the existence of these routes derives from an area of mathematics called dynamical systems applied to the mutual interaction of the gravities of the sun, nearby planets, and moons.



Artist Concept of the Interplanetary Superhighway, courtesy of JPL, artist Cici Koenig.

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