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## **Yarkovsky and YORP Effects: Theoretical Models, Observational Confirmations, and Implications for Asteroid Evolution**

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The Yarkovsky and YORP effects originate due to the light pressure recoil force acting on the surface of an asteroid. The Yarkovsky effect changes the asteroid's orbit, whereas the YORP effect changes its rotation state. Both effects appear to be crucially important for the long-term evolution of kilometer-sized asteroids.

The talk will review the recent successes and difficulties in the theoretical modeling of these effects, the growing body of their observational confirmations, and how these effects can alter asteroids' shapes, create binary asteroids and asteroid pairs, spread asteroid families and help asteroids to migrate from the main belt to the near-Earth orbits.