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Ring Model Applied to the Precession of Mercury TANNER FAR-LEY, JAMES ESPINOSA, Weatherford College — The orbit of Mercury precesses at a total rate of 5600 arc seconds; astronomers believe that 5025 arc seconds can be attributed to inertial effects. The gravitational forces from the other 7 planets produce a rate of 535", leaving a 43 arc seconds unaccounted. We will present a solar system model that replaces each of the outer 7 planets by rings and introduce Ritz's force law to describe the force that the sun exerts on Mercury, resulting in a unified Newtonian calculation of the remaining 578".

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