

# The Effects of Planet-Size Resonant KBOs

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**Pluto has played an important role in shaping the orbital distribution of Kuiper Belt Objects in the 2:3 resonance with Neptune (“Plutinos”). The existence of an object of comparable size in the 1:2 resonance, whether it has since been ejected or simply is yet undiscovered, would have a similarly significant effect on 1:2 resonant KBOs. Our objective is to explore this scenario by calculating dynamical diffusion rates, and other parameters, in these sections of phase space, including the changes caused by planet-size objects at various locations within the resonance. Here we present a report of our progress thus far.**