

WHAT THE SLOAN DIGITAL SKY SURVEY CAN SAY ABOUT THE JUPITER TROJANS?

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We present a spectroscopic analysis of the Jupiter trojan swarms using the Moving Object Catalog of the Sloan Digital Sky Survey (MOC - SDSS). We found for these objects a bimodal distribution of spectral slopes which agrees with those typical of objects with D or P taxonomic types. This bimodal distribution appears to be the result of the combination of the spectral slope distributions for non-family objects (large objects, mainly D-types) and family ones (small objects, mainly P-types), and could be suggesting that the small P-types trojans are produced by the collisional process that formed the families.