A Photometric Color Study of Karin family

Shigeru Takahashi[1]; Fumi Yoshida[2]; Takashi Ito[3]; Wing-Huen Ip[4]; Weng-Ping Chen[4]; A. Ibrahimov Mansur[5]

[1] NRO; [2] NAOJ; [3] ADAC, NAO, Japan; [4] NCU; [5] Ulugh Beg Astronomical Institute, Uzbekistan

A recent theoretical work (Nesvorny et al. Nature 2002) reports a new family composed of 39 asteroids was found as a result of numerical calculations. They named Karin family after the largest member (832) Karin. According to their study, the age of the Karin family would be 5.8 Myr, which denotes the members of Karin family are younger than most other known families (~2 Gyr). The physical and chemical properties of Karin family are interesting because they must expose less space weathered surfaces.

We have been studying the Karin asteroids at several observatories; Lulin, Vatican, Maidanak and UKIRT.

In this meeting we show the results of the observations, in particular, color tendency of the Karin family.