Kim Y. Ishiguro M. Usui F. Kasuga T.  
*Dynamical Evolution of the Dark Asteroids with Tisser and Parameter Tj<3* [#6122] 
AKARI mission gave us a better understanding of dark asteroids using both albedo data and dynamical models. In this presentation, we will discuss about the existence of dormant comets using two methods: study of albedo and dynamical evolution.

Ito T. Higuchi A.  
*Dynamical Evolution of the Oort Cloud new Comets* [#6209] 
We show preliminary results of our numerical integrations of test particles perturbed and transported from the Oort Cloud toward the terrestrial planetary orbits. The purpose of our integrations is to estimate dynamical lifetime of the new comets.

Shevchenko I. I.  
*Lyapunov and Diffusion Timescales of the Asteroidal Motion in Resonance Multiplets and Supermultiplets* [#6011] 
A theoretical method for estimating Lyapunov and diffusion timescales of the motion in resonance multiplets is presented and applied to estimate the characteristics of the chaotic motion of asteroids in two-body and three-body mean motion resonances.

Smirnov E. A. Shevchenko I. I.  
*Massive Identification of Asteroids in Three-Body Resonances* [#6012] 
We develop specialized algorithms and software for massive identification of asteroids in three-body Jupiter–Saturn–asteroid resonances of arbitrary order. We accomplish massive identification of main-belt asteroids moving in three-body resonances.

Machuca J. F. M. Carruba V. C.  
*Secular Dynamics and Family Identification Among Highly Inclined Asteroids in the Euphrosyne Region* [#6027] 
In this work we identified 18 families and 39 clumps in the Euphrosyne region, and for the first time we detected stable populations of asteroids in aligned and anti-aligned librating states of the \( \nu_5 \) and \( \nu_5 \) linear secular resonances.

Aljbaae S. Souchay J.  
*Specific Effects of Large Asteroids on the Orbits of Terrestrial Planets* [#6047] 
The large uncertainty on the determination of the mass of the asteroids is a serious limiting factor in the accuracy of the ephemerides. Consequently it is important to identify and provide a list of the individual effects of the asteroids.

Souami D. Galianzo M. Eggl S. Souchay J. Bancelin D.  
*The Vesta Asteroid Family: Study of the Family and Close Encounters with Terrestrial Planets (II)* [#6060] 
The Vesta family is the largest asteroidal family known in the inner main belt. We study its long-term evolution and investigate close encounters with Ceres, Vesta, and terrestrial planets, we also study the diffusion induced by the Yarkovsky effect.

Babadzhanov P. B. Kokhirova G. I.  
*The Family of Near-Earth Asteroids of Cometary Origin* [#6034] 
It is shown that nine near-Earth asteroids are in fact dormant comet nuclei or fragments of a larger cometary body, and should be considered as the constituent components of the Scorpiids meteoroid stream.

Schunova E. Walsh K. J. Granvik M. Jedicke R. Wainscoat R. J.  
*The Short Detectability of NEA Families Created by Tidal Disruptions During Close Planetary Encounters* [#6076] 
We present the results of a quantitative study of the detectability, evolution, lifetime and end-states of near-Earth asteroid families formed by tidal disruption during a close encounter with terrestrial planets, with focus on Earth and Mars.
Szutowicz S.

**Use of Light Curves and Alternative Nongravitation Force Model for Long-Period Comets** [#6192]

The observed activity profiles of eleven long-period comets are used to construct a g-like function i.e. outgassing as a function of heliocentric distance. The orbital motion of the comets is investigated.

Kolomiyets S. V. Voloshchuk Yu. I. Cherkas Yu. V.

**Spectral Analysis of the Distribution of Near Earth Asteroids Semi-Major Axes** [#6224]


**Data Mining the Suprimecam Archive for Near Earth Asteroids** [#6235]

We started a project to datamine the SuprimeCam archive searching for NEAs in order to improve their orbits. Using 60,000 images the EURONEAR data-mining tool predicted about 2100 images holding ~500 recovered or precovered NEAs and PHAs up to V=26.

Kornos L. Veres P. Toth J.

**Frequency of Asteroid’s Tidal Break-Up** [#6320]

Frequency of asteroid’s tidal break-up during their close approach to the Earth is modeled with respect to NEA spin rate distribution.

Rosenberg E. D. Weissman P. R. Wolters S. D.

**The Influence of Asteroid Shape on the Yarkovsky Effect – A Numerical Study** [#6483]

A numerical study of the Yarkovsky effect on non-spherical (prolate and oblate spheroid) object at various obliquities with orbital parameters of asteroid 6489 Golevka. Significant differences from a spherical approximation were found.

Krugly Yu. N. Golubov O.

**Tangential YORP** [#6375]

Sunlit stone on the asteroid surface experiences a net recoil force directed eastwards that accelerate asteroid rotation. We call this effect the tangential YORP to distinguish it from the normal YORP induced by gross-scale asymmetry of the asteroid.

Fujii A. F. Michikoshi S. M. Kokubo E. K.

**Self-Gravity Wakes in Dense Planetary Rings** [#6308]

In Planetary rings, interplay among particle collisions and gravitational attraction leads to the formation of “self-gravity wakes”. We investigate the interrelation between the shape of self-gravity wakes and the physical characteristics of rings.