

## **809 Lundia - a new synchronous V-type binary in the Flora family**

*Agnieszka Kryszczynska (Astronomical Observatory, A. Mickiewicz University, Poznan, Poland), Francois Colas (IMCCE, Paris Observatory, France), Magdalena Polinska (Astronomical Observatory, A. Mickiewicz University, Poznan, Poland), Tomasz Kwiatkowski (Astronomical Observatory, A. Mickiewicz University, Poznan, Poland), Mirel Birlan (IMCCE, Paris Observatory, France), Przemyslaw Bartczak (Astronomical Observatory, A. Mickiewicz University, Poznan, Poland), Pascal Descamps (IMCCE, Paris Observatory, France)*

Binary nature of 809 Lundia was discovered during observing campaign of the Flora family objects carried out at Borowiec Observatory (Poland) in Sept. 2005 (IAUC 8614). Photometric observations of Lundia were continued in Borowiec and Pic du Midi Observatory in till Jan. 2006 and in Jan. 2007 when no eclipses were visible. Photometric data allowed us to determine a preliminary model of the Lundia system.

809 Lundia was known as V-type (Florczak et al. 2002) and was supposed to be an interlooper in the Flora family. Our spectroscopic observations from Dec. 2005 and Mar. 2007 done with SpeX/IRTF show that both components are V-type.

Carruba et al. (2005) analysed possible migration of Lundia type bodies from Vesta family to its current orbits (in the Flora family) taking into account nonlinear secular resonances and the Yarkovsky effect. However they assumed migration of a single body. It would be good to know how Yarkovsky effect influence binary asteroids.

References:

Carruba et al. 2005, A&A 441, 819  
Florczak et al. 2002, Icarus 171, 120