Characterization of the Nucleus, Coma, and Outbursts of Comet 29P/Schwassmann-Wachmann 1

We present results from our study of comet 29P/Schwassmann-Wachmann 1. We constrain properties of the nucleus and coma through the use of mid-infrared imaging from the WISE spacecraft and visible ground-based imaging while the comet is in outburst.

Comet 10P/Tempel 2 Outgassing Observed with Herschel Space Observatory

Comet 10P/Tempel 2 was observed with the HSO in the framework of the Herschel GTK project. We present long and short-term monitoring of water lines performed with Herschel/HIFI. Anisotropic outgassing is assumed to model line profiles and OTF maps.

Far Infrared Observation of Comet C/1995 O1 (Hale-Bopp) with the Herschel Space Observatory at r=29.95AU

We report observations of C/1995 O1 (Hale-Bopp) made on 2010 June 10, with the Herschel Space Observatory at 70 and 160 microns, at a heliocentric distance of r=29.95 AU.

Water D/H Ratio in Comet C/2009 P1 (Garradd) from Herschel

Measurements of isotopic ratios provide key information about the formation of cometary materials. We will present the first Herschel D/H measurement in the water of a long-period comet to be compared to the Ocean’s like value in 103P/Hartley 2.

Production Rate and Spatial Distribution of Carbon in the Coma of C/1995O1 (Hale-Bopp): Implications for the Neutral Carbon Lifetime and Coma Velocity Structure.

We update the calibration of Far UV carbon observations of comet Hale-Bopp using a star of known brightness in the field of view and improving dust subtraction. From this we obtain a carbon production rate and place limits on the lifetime and outflow.

A Dynamical Analysis of Cometary Dust Tails Observed by WISE/NEOWISE

The WISE mission surveyed the sky in four infrared wavelength bands from Jan. 2010 to Feb. 2011, serendipitously observing over 130 comets. We present here preliminary dynamical dust models of a few of the most dramatic comets observed by WISE.

The Sodium Tails of Near-Sun Comets

We present observations of the neutral sodium tails of several near-Sun, non-Kreutz comets imaged by the SOHO LASCO coronagraph.
Sekiguchi T. Ootsubo T. Hasegawa S. Usui F. Cruikshank D. P. Dalle Ore C. M. Müller T. G.

**AKARI Observations of Minor Bodies in the Outer Solar System** [#6477]

Akari (Astro-F) is an infrared satellite developed by JAXA. We performed Far-IR photometric observations of 4 centaurs, 12 TNOs with FIS, and Near-IR Spectroscopic observations of a naked cometary nucleus object, P/2006 HR30 in 2–5.5 um with the IRC.


**Gaia-GBOT Pipeline: A Precise Astrometric Measuring Tool for Moving Celestial Bodies** [#6100]

This talk presents the function and the tasks of GBOT group within Gaia mission by ESA, and more specifically an overview of all the capabilities of Gaia-GBOT pipeline for the high precision astrometry of moving celestial bodies.