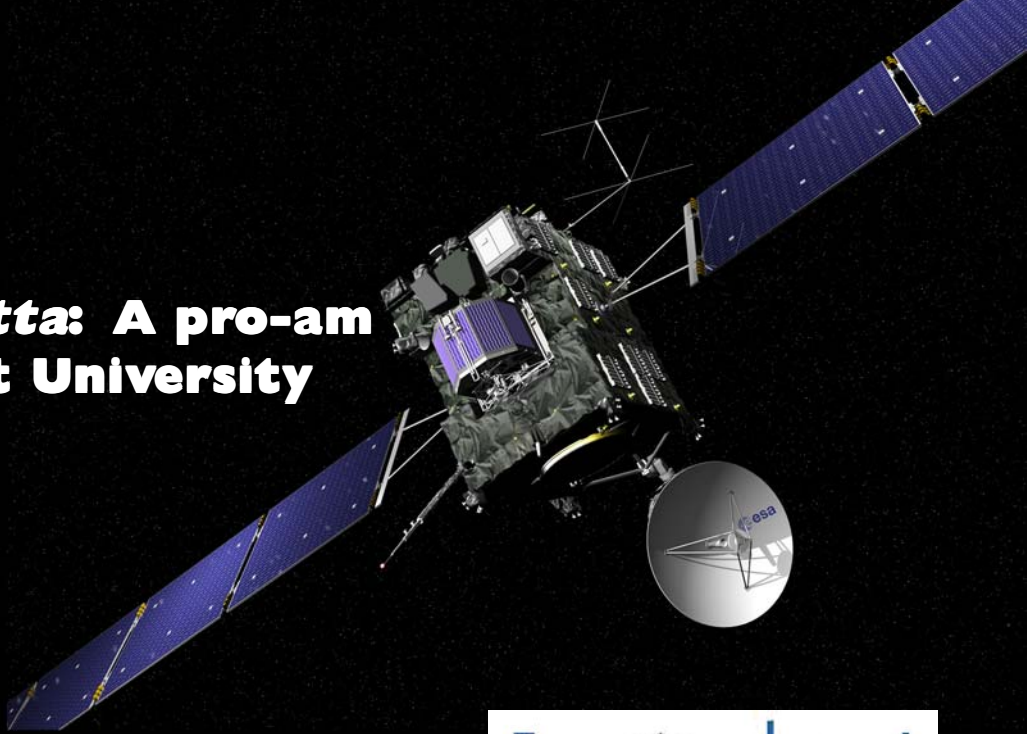


Supporting Rosetta: A pro-am workshop held at University College London

The European Space Agency's probe *Rosetta* is due to arrive at Comet 67P/Churyumov–Gerasimenko in 2014. A workshop to plan ground-based observations was held at UCL on 2012 April 17–18.



We are living through exciting times for cometary astronomy. ESA's *Rosetta* spacecraft (if all goes well after its journey of more than 10 years) will go into orbit around the nucleus of Comet 67P in 2014 May. Six months later the lander probe, *Philae*, should touch down on the comet's nucleus, from where it will transmit information from each of its 10 instruments monitoring the environment as the comet approaches perihelion in 2015 August.

In support of the space mission, ground-based observations are also planned and it was with this in mind that a workshop was organised by the EuroPlaNet consortium to which Guy Hurst, Jonathan Shanklin and myself were invited as representatives of the amateur community.

It was recognised early in the planning stages that amateur astronomers have an especially important role to play in the success of the mission. For instance, seen from Earth the comet spends a considerable amount of time at low solar elongations (*viz.* $<50^\circ$ from the Sun in the sky) during which it will not be accessible to large ground-based telescopes. This is where amateurs can contribute, not only in potentially pro-

viding near-continuous coverage, but in extending observations to elongations as low as 20° , which will be especially important during the period near perihelion, 2015 April–September. Amateurs also have access to robotic instruments including the Faulkes Telescopes. Nick Howes, pro-am programme manager for the Faulkes Project, explained the various ways in which their facilities can be used to support the *Rosetta* mission, including engaging schools to take part in themed observing days.

European astronomers are also keen to maximise the benefits of *Rosetta* for the public by encouraging outreach activities, as detailed by Anita Heward of the EuroPlaNet Media Centre. Initiatives conducted in support of the recent EPOXI mission to Comet 103P/Hartley are good examples of such outreach.

We can look forward to the mobilisation of a range of resources available to amateur observers, coordination of which will represent something of a challenge. It was agreed that a centralised database for archiving images would be a great benefit and motivation for amateurs wishing to contribute. Professionals may be able to provide amateurs with filters to improve the usefulness of our imaging, and collaborators will get their names on scientific papers.

Amateurs may be the first to detect a cometary outburst, or the onset of an ion tail, both important changes in the environment at the comet about which professional astronomers need to be alerted. Expect activities involving Comet 67P to build up momentum during 2013 with a European Comet Workshop on the drawing board and, from September 8–13, the 2013 European Planetary Science Congress also taking place at University College London.

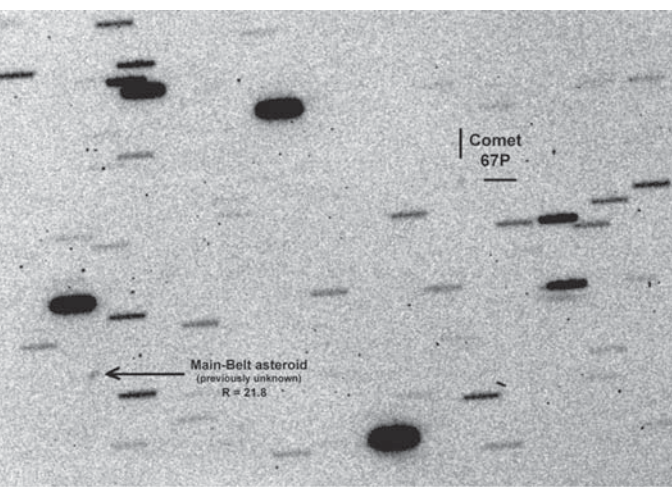
Comet 67P is currently near aphelion and at 23rd magnitude is a difficult target for amateur imagers. Nonetheless, just the very next day (April 19) the comet was



'snapped' with the 2.0m Faulkes Telescope South, appearing as a very faint point source along with a previously unknown main-belt asteroid which happened to be crossing the same field of view at the time. The last astrometry of this comet was almost two years earlier on 2010 July 7 when 4.22 AU from the Sun.

Comet 67P passed through aphelion on 2012 May 21 at 5.69 AU from the Sun. We now have every prospect of keeping a close watch on the comet virtually throughout its entire orbit.

Richard Miles



First 'recovery' image of Comet 67P/Churyumov–Gerasimenko, one month from aphelion, obtained using the 2.0m Faulkes Telescope South situated at Siding Spring, Australia. 2012 April 19.5254 (12:17–12:54UT), Sloan r' filter, integration 1800 sec., fov 2.1x3.0 arcmin., comet magnitude R = 22.8. R. Miles.