

# Expanding international collaboration at the La Palma Observatory



Representatives of PPARC, IAC and the NWO sign a new agreement for the ING

The Isaac Newton Group of telescopes (ING) is a PPARC organisation responsible for running three telescopes on the island of La Palma in Spain, the largest of which is the 4.2-metre William Herschel Telescope. Until now, ING has been a joint effort between the UK and the Dutch national science funding agency NWO. However, last spring, the ING became a three-

partner enterprise when the Astrophysics Institute of the Canary Islands (IAC) joined the international effort. On 6 May, the new agreement was signed in the IAC on Tenerife by Francisco Sanchez for the IAC, Richard Wade for PPARC, and Annejet Meijler for the NWO.

The IAC is responsible for the operation of the Observatory site, which now hosts a large

and growing number of telescopes, combining the efforts of many European countries. Most notably, under current construction are the 17-metre MAGIC telescope which is designed to detect so-called Cherenkov light from cosmic radiation, and the 10.4-metre GRANTECAN, which upon completion will be the largest common-user optical and infrared telescope in the world. Spain, and specifically the IAC, are taking a leading role in the latter project.

Our new tripartite relationship between the UK, The Netherlands and Spain holds the prospect of future collaborations in scientific

programmes and projects. With this new agreement, Spain gains nearly 10 per cent of the available telescope time at ING. In return, the financial contribution from the IAC offsets cost savings required from the UK side. Moreover, the IAC is constructing a world-class infrared spectrograph for the William Herschel Telescope which will be offered to all its users, thus enhancing the telescope's scientific capability.

With this agreement, ING has found a new balance with its three partners that will bring scientific benefits for all astronomers as well as new opportunities for collaborations with our Spanish colleagues.

**Rene Rutten**

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## esa News from ESA

By now, I hope, scientists and engineers of the Rosetta mission have learned to spell Churyumov-Gerasimenko. That's the name of our new target comet, announced at the end of May. When misgivings about the Ariane 5 launcher forced the cancellation of the intended January 2003 launch towards Comet Wirtanen, an urgent re-think followed. Comets don't stand still while you hesitate.

Our comet-chaser Rosetta was conceived to use a series of planetary swingbys to put itself into the same course around the Sun as a selected short-period comet. It can then go into orbit around the comet for many months, and drop a lander on the surface. Our colleagues at the European Space Operations Centre in

Darmstadt tested many possible scenarios, with various comets.

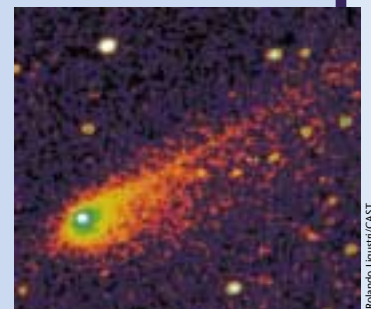
Although Comet Churyumov-Gerasimenko soon emerged as a promising candidate, not much was known about it. Following its discovery in 1969, by Klim Churyumov and Svetlana Gerasimenko working at Alma Ata in Kazakhstan, it attracted little attention. Happily, we were able to arrange for fresh inspections of the comet by the Hubble Space Telescope and the European Southern Observatory's Very Large Telescope in Chile, before confirming the choice of target.

With an elongated nucleus about 5 kilometres long and 3 kilometres wide, Churyumov-Gerasimenko is more massive than Wirtanen. We have to reconsider our manoeuvres near the comet and the procedure

for dropping the Rosetta Lander onto it gently. Also under discussion are the precise routing and timeline to interception, with regard to opportunities for inspecting Main Belt asteroids on the way.

### Rosetta launch-date

The baseline itinerary now calls for a launch in February 2004, followed by swingbys of Earth and Mars, and Rosetta closing with the comet in November 2014. The mission nominally finishes about 5 months after Churyumov-Gerasimenko makes its closest approach to the Sun in August 2015. Altogether, the postponement adds more than 2 years to what was already a long-drawn-out project, and increases the number of team members who will be past their retirement ages before the end of it. That is not a trivial problem for the participating universities and institutes.



67P/Churyumov-Gerasimenko

As for the Ariane 5 launcher, we are satisfied with the reliability of the version intended for Rosetta. The reason for the failure of a more powerful version, in December 2002, is now understood and being rectified. We hope that during next year it will be flying successfully. In principle it could send Rosetta to Churyumov-Gerasimenko by the same rendezvous date, with a later launch, but we are minded to stay with the version we know.

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