



*Figure 3: Final moments of the re-assembly of the motor.*

We also installed a set of high-speed fans around the main mirror, to produce a constant artificial wind which disrupts

whose upper part is completely transparent to the wind. This provides an air-flow over the secondary mirror, and

the hot air cells that could form over the mirror. This strongly contributes to improve the image quality when there is no wind. The baffle of the secondary mirror has been changed for a light-weight, Kevlar and Carbon fibre structure that is optically equivalent to the former baffle, but

avoids the formation of a hot-air bubble that would introduce some aberrations. Another article in this issue of *The Messenger* describes these improvements and their results in more details.

## Staff

Since our last report, Ismo Kastinen and Hernan Nuñez (Telescope and Instrument Operators) have left the team; Ismo is now a Software Engineer at La Silla, and Hernan a TIO at the VLT. Gabriel Martin (TIO) is about to leave the NTT to work at the Magellan Observatory on Las Campanas as Instrument Specialist. Monica Castillo and Duncan Castex have joined the Team as TIO. There are also many changes in the astronomical staff: Vanessa Doublier (fellow) has left the Team, and Stephane Brillant (fellow) is currently on his last shift at the NTT; both of them have been hired as staff astronomers at the VLT. Obviously, the NTT is an excellent training camp for Paranal! Malvina Billeres and Merieme Chadid have joined the NTT Team as fellows.

## 2p2 Team News

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### Personnel Movements

In December we welcomed Emanuel Galliano to our team. Emanuel is a French student at ESO Chile who is already familiar with La Silla, through his previous work with the DENIS group. He will be working primarily on operations at the 2.2-m.

In February, however, we bade farewell to Emanuela Pompei after nearly two years with the team. Although Emanuela is leaving La Silla, she will remain with ESO in Chile, commencing work as a Staff Astronomer on Paranal in March. We wish her all the best in her move north.

### P2PP and BOB Now on the 2.2-m

In December, the final commissioning phase of the new operating software at the 2.2-m took place. This means that Wide Field Imager (WFI) observing programmes at the 2.2-m telescope are now performed using VLT Observing Software, with all pointing and exposure acquisitions controlled through Observation Blocks (OBs).

If you have upcoming Service Mode observations, then you will be contacted directly about the creation of OBs as

part of the Phase-2 preparations for your programme.

If you have an upcoming Visitor Mode WFI run, then you will need to familiarise yourself with the P2PP software. Specifically, you should know how to create and edit OBs in this environment, as this is what is used at the telescope. You should also be aware of the different types of WFI-specific templates available to build OBs, and plan your observations accordingly. Whether or not you choose to prepare your OBs in advance of coming to observe is up to you. If you already have experience with P2PP, you may wish to install the software at your home institute and create your OBs ahead of time. Otherwise it is better if you can create your OBs on the mountain. In this case, it is highly desirable that you arrive the day before your first night if this is at all possible. Allowing ample time for preparation plays a major part in the efficiency of the observing run.

Further information can be found at our 2.2-m P2PP/BOB web page, at [http://www.ls.eso.org/lailla/Telescopes/2p2T/E2p2M/WFI/P2PP\\_BOB/](http://www.ls.eso.org/lailla/Telescopes/2p2T/E2p2M/WFI/P2PP_BOB/). It contains links to the P2PP Home Page and the new WFI Templates Manual, which describes observing templates available for OB creation. The page also has instructions for installing and running the software at your home institute, including use of the WFI Instrument Package. As always, questions or comments can be directed to the 2p2 Team at any time ([2p2team@eso.org](mailto:2p2team@eso.org)).

### New CCD on the Danish 1.54-m

A new CCD was commissioned at the Danish 1.54-m in September by a team from the Copenhagen University Observatory. The new EEV/MAT CCD (2048 × 4096 pixels) replaces the old Loral 2048 × 2048 detector to bring about improvements on two fronts. First, the new device does not suffer from the same charge diffusion problem as the old CCD. This problem was thought to have been responsible for the consistently poorer seeing measured at this telescope compared to others. Second, the EEV CCD has half the read-out noise (3 e<sup>-</sup> rms) of the old device, and a much larger full-well.

However, the optics of DFOSC do not allow the full area of this large format device to be used. The region used suffers from some defects such as bad columns and charge traps, in a similar way to the Loral chip. The quantum efficiency of the EEV device is slightly less, peaking around 450 nm and declining steadily to the red. The parallel charge transfer efficiency shows no losses although there is a small but non-negligible loss in the serial direction due to trap in the serial register.

A full report on the characteristics of the device (by Anton Norup Sorensen of the Copenhagen University Observatory), is available from the 2p2 Team Web Page at <http://www.ls.eso.org/lailla/Telescopes/2p2T/D1p5M/misc/ringo.ps>.