

PREFACE

The Gran Telescopio Canarias (GTC) is now under routine science operations. Over 75% of the time is being devoted to science. Astronomers from the three communities that the GTC caters for are obtaining high quality data. Scientific papers are appearing in the specialised journals at an ever-increasing pace.

This is the fourth of the series of meetings on “Science with the GTC”. Previous meetings were held in wonderful settings, such as Granada (Spain), Mexico City (Mexico), or Coral Gables, Florida (USA). This fourth meeting has taken place in yet another wonderful venue, namely Santa Cruz de La Palma, in the very island home to the GTC. The main difference between this meeting and the previous ones is, however, that this time actual data from the GTC were available, as was readily shown in the conference.

Over 170 people gathered for this occasion. There were impressive results presented during the meeting, as well as the promise of more to come. Overall it was an exciting meeting, where the GTC has shown a noticeable improvement in operational efficiency, and its staff has shown dedication, good expertise and control of the queue observations.

On the science front we saw measurements with the OSIRIS Tuning Filter of the potassium line in the atmospheres of extra-solar planets. We saw fast spectroscopy, also with OSIRIS, of compact binaries and of X-ray transients, or how OSIRIS is expanding the horizon of the understanding of massive stars metallicity. On the extragalactic front, spectroscopy of faint, interesting “Green Pea” galaxies, starbursts and AGNs were presented. Further noteworthy results were the spectroscopy of gravitationally lensed galaxies, or the study of the intergalactic medium in the Stephan Quintet.

Three ESO/GTC projects with Spanish PIs were also presented. These are SHARDS, GLACE and the CanariCam study of AGNs. This is an outstanding demonstration of the success of Spanish astronomy, as 3 out of 8 ESO/GTC projects have been accepted in international competitions.

Last but not least, the morning of the last day of the conference was a tribute to Prof. Francisco Sánchez for his great contributions to Astronomy in Spain, including his most recent and perhaps most relevant achievement, the GTC. At the end of the meeting he explained the inside history of the making of the GTC. This talk is available in video format at the link <http://www.iac.es/congreso/gtcscience4/pages/videos-photos.php>.

Finally, let’s add that the venue resulted very enjoyable and the participants were able to taste the street life of the small, beautiful and cozy city of Santa Cruz.

Casiana Muñoz-Tuñón and José Miguel Rodríguez-Espinosa