

The most powerful European astronomical observatories and their interplay with e-science

Thursday, 19 September 2013 09:30 (30 minutes)

Astronomy is largely an observationally-driven scientific discipline, but with a wide range of associated activities (space exploration, computing, data archiving, theory and simulations, etc.). Large observatories built and operated by European intergovernmental organisations, in particular those from ESO - European Southern Observatory and ESA - European Space Agency, drive a very significant part of the scientific activity in astronomy around the world. I will present ESO's programme, including existing (VLT, ALMA) and future (E-ELT) most powerful ground-based astronomical observatories and their interplay with ESA's space observatories. I will also illustrate a few avenues where astronomy meets e-science, both in operating large infrastructures, but also in generating numerical models and archiving/accessing data collected by observational infrastructures.

Xavier Barcons is an astronomer, based at the Instituto de Física de Cantabria in Spain. His research in astronomy focuses on active galaxies and X-ray sky surveys. He has advised the European Space Agency, the Spanish government and a large number of research infrastructures and projects. Sin 2012, Xavier Barcons is the council president of the European Space Observatory.

Description of Work

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Wider Impact of this Work

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Session, double-session

NA

Printable Summary

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Session Classification: Plenary Session