

Scisoft VII – with Virtual Observatory Support

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on behalf of the Scisoft Team

The Scisoft bundle is a collection of astronomical software intended mostly for ESO users but which is also distributed to other interested parties. It includes most of the packages needed by working observational astronomers, with emphasis on those widely used for handling optical and infrared data sets. Scisoft is installed on almost all the scientific computers running Linux at ESO Garching and widely at the ESO sites in Chile. More complete details can be found on the Scisoft web pages at <http://www.eso.org/scisoft>.

We are pleased to announce the availability of Scisoft VII (June 2007). This new version of the collection includes many updates and additional packages and also incorporates some new features. For the first time we have a collection of Vir-

tual Observatory (VO) tools as well as extended support for longer-wavelength data handling from submillimetre facilities such as APEX.

A list of the items included in the new version, and where there are changes from the previous one, is given on the web pages. Scisoft VII was built on, and intended to be used on, Fedora Core 6 Linux, but is likely to run on many similar modern Linux systems. We no longer maintain a version of Scisoft for other architectures such as Solaris or HP-UX, but a similar version for Mac OS X, produced independently of ESO, is also available through a link on the Scisoft web page.

Scisoft VII can be either downloaded from the ESO ftp site (<ftp://ftp.eso.org/scisoft/scisoft7/linux/fedora6/>) or the entire collection may be requested on DVD through the ST-ECF on-line shop at [http://www.spacetelescope.org/hubble-](http://www.spacetelescope.org/hubble-shop/webshop/webshop.php?show=sales§ion=cdrms)

[shop/webshop/webshop.php?show=sales§ion=cdrms](http://www.spacetelescope.org/hubble-shop/webshop/webshop.php?show=sales§ion=cdrms). We also continue to support a mirror of the Scisoft collection in China (<http://scisoft.lamost.org/>). Note that only requests from China, to be delivered in China, are accepted by the Chinese mirror site.

Scisoft is a collaboration involving many people. I would particularly like to thank Mathias André and Jean-Christophe Malapert for their help with the preparation of the release. I would also like to thank Markus Dolensky for proposing the addition of VO content and Mark Allen (CDS, Strasbourg) for selecting the VO tools we include. We are grateful to Chenzhou Cui of the National Astronomical Observatory, Chinese Academy of Sciences, for his continued support of the Chinese mirror. Finally a special word of thanks goes to Peter Stetson (HIA, Canada) for allowing us to include DAO-Phot and related tools in the collection.

Gruber Prize in Cosmology Awarded for the Discovery of the Accelerated Expansion of the Universe

Nearly a decade ago astronomers from two competing teams announced that they had found evidence for an accelerated cosmic expansion. The Gruber Prize in Cosmology 2007 honours this achievement and has been awarded to two groups: the Supernova Cosmology Project team, led by Saul Perlmutter (Lawrence Berkeley Laboratory), and the High-z Supernova Search Team, led by Brian Schmidt (Australian National University). Their results were based on the observations of distant Type Ia supernovae and were obtained with the major telescopes at the time (Riess et al. 1998, AJ 116, 1009; Perlmutter et al. 1999, ApJ 517, 565). Both teams used the 3.6-m telescope and the NTT to contribute photometry and spectroscopic classifications of the supernovae. Four people at ESO were directly involved in the two teams and are recognised as co-recipients of the Gruber Prize. Isobel Hook (now

at Oxford University) and Chris Lidman (ESO Chile) were ESO Fellows when they contributed to the work of the Supernova Cosmology Project, while Jason Spyromilio and Bruno Leibundgut (both ESO Garching) participated in the High-z Supernova Search Team.

The citation by the Gruber foundation reads: "Saul Perlmutter and Brian Schmidt and their teams: the Supernova Cosmology Project and the High-z Supernova Search Team, independently discovered that the expansion of the Universe is accelerating. Their discovery led to the idea of an expansion force, dubbed Dark Energy. And it suggested that the fate of the Universe is to just keep expanding, faster and faster."

The Peter and Patricia Gruber Foundation is a private, United States-based philanthropic organisation established in 1993

to honour and encourage educational excellence, social justice and scientific achievements that better the human condition.

In the meantime research on Dark Energy has become a major cosmological enterprise. Characterising the nature of Dark Energy has direct implications on particle physics as well. The original work on the cosmic acceleration has been continued and expanded by several active teams. Many of the scientists in the original teams are members of these new efforts working towards determining the equation of state of Dark Energy. Most of these experiments make extensive use of the VLT, together with Keck, Gemini and the Magellan telescopes, for the spectroscopic classification and examination of possible evolutionary trends of the supernovae.