

ESO is the European Organisation for Astronomical Research in the Southern Hemisphere. Whilst the Headquarters (comprising the scientific, technical and administrative centre of the organisation) are located in Garching near Munich, Germany, ESO operates three observational sites in the Chilean Atacama desert. The Very Large Telescope (VLT), is located on Paranal, a 2 600 m high mountain south of Antofagasta. At La Silla, 600 km north of Santiago de Chile at 2 400 m altitude, ESO operates several medium-sized optical telescopes. The third site is the 5 000 m high Llano de Chajnantor, near San Pedro de Atacama. Here a new submillimetre telescope (APEX) is in operation, and a giant array of 12-m submillimetre antennas (ALMA) is under development. Over 1600 proposals are made each year for the use of the ESO telescopes.

The ESO Messenger is published four times a year: normally in March, June, September and December. ESO also publishes Conference Proceedings and other material connected to its activities. Press Releases inform the media about particular events. For further information, contact the ESO Public Affairs Department at the following address:

ESO Headquarters  
Karl-Schwarzschild-Straße 2  
85748 Garching bei München  
Germany  
Phone +49 89 320 06-0  
Fax +49 89 320 23 62  
information@eso.org  
www.eso.org

The ESO Messenger:  
Editor: Peter Shaver  
Technical editor: Jutta Boxheimer  
www.eso.org/messenger/

Printed by  
Peschke Druck  
Schatzbogen 35  
81805 München  
Germany

© ESO 2006  
ISSN 0722-6691

## Contents

### Reports from Observers

A. Eckart et al. – The Galactic Centre: The Flare Activity of SgrA* and High-Resolution Explorations of Dusty Stars	2
A. Korn et al. – New Abundances for Old Stars – Atomic Diffusion at Work in NGC 6397	6
VLT Image of Globular Cluster 47 Tuc	10
N. M. Förster Schreiber et al. – The SINS Survey: Rotation Curves and Dynamical Evolution of Distant Galaxies with SINFONI	11
N. Drory et al. – The Evolution of Galaxies in the FORS Deep and GOODS-S Fields	15
A Supernova in an Interacting Pair of Galaxies	19
D. Schaerer et al. – Searching for the First Galaxies through Gravitational Lenses	20
VLT Images of a Disintegrating Comet	23
F. Coppolani et al. – Transverse and Longitudinal Correlation Functions in the Intergalactic Medium	24
Extrasolar Planets and Brown Dwarfs: A Flurry of Results	27

### Telescopes and Instrumentation

J.-L. Beuzit et al. – SPHERE: a ‘Planet Finder’ Instrument for the VLT	29
A. Richichi, A. Moorwood – Second-generation VLTI Instruments: a First Step is Made	35
A. Baudry et al. – The ALMA Back-End	37
N. Delmotte et al. – The 2006 ESO Science Archive Survey	41
M. Sarazin, E. Graham, H. Kurlandczyk – FriOWL: A Site Selection Tool for the European Extremely Large Telescope (E-ELT) Project	44

### Other Astronomical News

J. Peacock, P. Schneider – The ESO-ESA Working Group on Fundamental Cosmology	48
P. Shaver – Report on the XXVth IAU General Assembly	51
U. Grothkopf – Report on the Conference on Library and Information Services in Astronomy: LISA V	53
G. Argandoña, F. Mirabel – New ALMA Site Museum Preserves Valuable Local Culture	55
G. Argandoña, F. Mirabel – ESO-Chile Fund for Astronomy: 10 Years of Productive Scientific Collaboration	56
Fellows at ESO – R. Kotak	58
Corrigendum	58

### Announcements

Vacancy notice	59
Personnel Movements	59

Front Cover Picture: Globular Cluster 47 Tucanae  
See page 10 for details.