



Proceedings of the Symposium

Exploiting the ISO Data Archive: Infrared Astronomy in the Internet Age

Sigüenza, Spain
24-27 June 2002

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**EXPLOITING THE ISO DATA ARCHIVE:
INFRARED ASTRONOMY IN THE INTERNET AGE**

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**European Space Agency
Agence spatiale européenne**

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CONTENTS

Foreword	ix
The ISO Data Archive - Content & Context	
Alberto Salama, Christophe Arviset, John Dowson, José Hernández, Pedro Osuna, Aurèle Venet: <i>The ISO Data Archive: Overview of scientific content and use</i>	3
Martin Harwit: <i>The ISO Central Programme and its unexplored potential</i>	9
Françoise Genova: <i>Archive interoperability in the Virtual Observatory</i>	13
Babar Ali, Mihseh Kong, Alberto Salama: <i>The ISO Visualizer – A new way to look at ISO data</i>	17
James Brauher: <i>An ISOLWS survey of galaxies: an example of the systematic use of the ISO Data Archive from conception to results</i>	21
Jean Matagne: <i>The Infrared Space Observatory users community</i>	27
Göran L. Pilbratt: <i>Herschel Space Observatory mission summary</i>	31
Issei Yamamura, Masahiro Tanaka, Hidenori Takahashi, Sin’itiro Makiuti, Takanori Hirao, Taka-fumi Ootsubo, Mikako Matsuura, Kenich Okumura, Daisuke Ishihara, Takao Nakagawa, Hiroshi Murakami, Takashi Onaka, Hiroshi Shibai: <i>Yet another infrared archive: release of the Infrared Telescope in Space (IRTS) archive data</i>	35
Solar System	
Thierry Fouchet: <i>The achievements and potential of ISO archive for planetary studies</i>	41
Thomas G. Müller: <i>ISO observations of asteroids, comets and interplanetary dust: results and unexploited observations</i>	47
Astrochemistry and Solid-State Physics	
Christine Joblin: <i>What lies hidden in the ISO archive on solid-state dust features?</i>	55

Kathleen E. Kraemer, Steve D. Price, Gregory C. Sloan, Helen J. Walker, Russell F. Shipman: <i>An atlas of full-grating short wavelength spectrometer spectra: classification and processing</i>	63
Isabel Llamas Jansa, Harald Mutschke, Dominik Clément, Cornelia Jäger, Thomas Henning: <i>IR spectroscopy of carbon nanoparticles from laser-induced gas pyrolysis</i>	69
Stars and Circumstellar Matter	
Laurens B.F.M. Waters: <i>ISO spectroscopy of stars: the potential of the archive</i>	75
Joris Blommaert: <i>Status and potential of the ISOGAL survey</i>	81
Bart Vandenbussche: <i>The scientific potential of the post-helium database</i>	87
Takashi Tsuji: <i>Water observed in red giants and supergiant stars – Manifestation of a novel picture of the stellar atmosphere or else evidence against the classical model stellar photosphere</i>	93
Pedro García-Lario, José V. Perea Calderón: <i>The transition from AGB stars to planetary nebulae as seen by ISO</i>	97
Ryszard Szczerba, Jin Hua He, Pei Sheng Chen: <i>Radiative pumping of 1612 MHz OH masers: OH/IR sources with IRAS LRS spectra and 34.6 micrometer absorption feature</i>	101
Marie Jourdain de Muizon: <i>Debris discs around stars: the ISO legacy</i>	105
Brunella Nisini: <i>Star formation and early evolution in the ISO data-base</i>	111
Davide Elia, Loretta Campeggio, Francesco Strafella, Teresa Giannini, Dario Lorenzetti, Brunella Nisini, Stefano Pezzuto : <i>The IR continuum of the Herbig Ae/Be stars as seen by the ISO spectrometers: a contribution to the modeling of the circumstellar environment</i>	117
Timo Prusti: <i>Luminosity functions of young stellar clusters: ISO data archive as a part of the Virtual Observatory</i>	121
Sergio Molinari, Babar Ali, John Good, Alberto Noriega-Crespo: <i>A star formation/ISM astronomical database</i>	125
Péter Ábrahám, Attila Moór, Csaba Kiss, Philippe Héraudeau, Carlos del Burgo: <i>Circumstellar dust around main-sequence stars: what can we learn from the ISOPHOT archive?</i>	129
Oliver Krause, L. Victor Tóth, Roland Vavrek, Manfred Stickel, Dietrich Lemke: <i>Follow-up studies of very young intermediate and high mass star forming regions detected by the ISOPHOT Serendipity Survey</i>	133

Dario Lorenzetti, Teresa Giannini, Brunella Nisini, Milena Benedettini, Davide Elia, Loretta Campeggio, Francesco Strafella: <i>The complete far infrared spectroscopic survey of Herbig AeBe stars obtained by ISO-LWS</i>	137
Thomas Posch, Franz Kerschbaum, Harald Mutschke, Dirk Fabian, Dominik Clément, Johann Dorschner: <i>Features of oxide dust particles in circumstellar shells of AGB stars</i>	141
Aafifa Ramdani: <i>Low mass loss in late type stars</i>	145
Ryszard Szczerba, Grażyna Stasińska, Natasza Siódmiak, Sławomir K. Górný: <i>Classification of ISO SWS 01 spectra of proto-planetary nebulae: a search for precursors of planetary nebulae with [WR] central stars</i>	149
Issei Yamamura, Mikako Matsuura, Albert A. Zijlstra, Timothy R. Bedding: <i>The extended atmosphere and evolution of the RV Tauri star, R Scuti</i>	153
Parallel Modes and Serendipity Survey	
Stephan Ott, Ralf Siebenmorgen, Norbert Schartel, Thúy Võ: <i>Status and scientific potential of the ISOCAM parallel mode survey</i>	159
Tanya Lim: <i>The scientific potential of the LWS parallel and serendipity modes</i>	165
Manfred Stickel, Dietrich Lemke, Ulrich Klaas, Oliver Krause, L. Victor Tóth, Roland Vavrek, Stefan Hotzel, the CISS consortium: <i>The scientific potential of the ISOPHOT Serendipity Survey</i>	169
Interstellar Matter	
Alain Abergel, Jean Philippe Bernard, François Boulanger, Anthony Jones, Marc-Antoine Miville-Deschénes, Laurent Verstraete: <i>Evolution of very small dust particles in molecular cloud observed with ISOCAM</i>	177
Marc-Antoine Miville-Deschénes, François Boulanger, Gilles Joncas, Edith Falgarone: <i>Using ISOCAM data to study diffuse interstellar dust emission.</i>	181
Biwei W. Jiang, Alain Omont, Shashikiran Ganesh, Guy Simon, Frédéric Schuller: <i>Mid-IR interstellar extinction towards the ISOGLAL field FC-01863+00035</i>	185
Csaba Kiss, Péter Ábrahám, Ulrich Klaas, Dietrich Lemke, Philippe Héraudeau, Carlos del Burgo: <i>An archive survey of cirrus structures with ISOPHOT</i>	189

Carlos del Burgo, René J. Laureijs, Péter Ábrahám, Csaba Kiss: <i>Far-infrared colours of high-latitude dust regions</i>	195
Emilie Habart, Laurent Verstraete, François Boulanger, Guillaume Pineau des Forets, Alain Abergel: <i>Gas to dust interaction studies with the ISO data base</i>	199
Edward T. Polehampton, Bruce M. Swinyard, Jean-Paul Baluteau: <i>The ISO LWS high resolution spectral survey towards Sagittarius B2</i>	205
Jean-Paul Baluteau, Fredéric Damour, Emmanuel Caux, Cécile Gry, Cecilia Ceccarelli: <i>Diffuse gas in the Galaxy: the Galactic plane</i>	209
Javier R. Goicoechea, José Cernicharo, Juan Ramón Pardo: <i>The ISO-LWS spectrum of Sgr B2 region</i>	213
Yoko Okada, Takashi Onaka, Hiroshi Shibai, Yasuo Doi: <i>ISO spectroscopy of Sharpless 171</i>	217
Paolo Persi, Anna Rosa Marenzi, Mercedes Goméz: <i>An infrared study with ISOCAM of Chamaeleon II and III dark clouds</i>	221
Charlotte Vastel, Edward T. Polehampton, Jean-Paul Baluteau, Bruce M. Swinyard, Emmanuel Caux, Pierre Cox: <i>[CII] 158 μm absorption line towards the Galactic Center: connection with bright IR galaxies</i>	225
Galaxies	
Takashi Onaka, Haruko Mochizuki, Toshinobu Takagi, Hiroshi Shibai: <i>Infrared emission spectrum of the galaxy and external galaxies based on the IRTS and ISO archival data</i>	231
Karsten Wilke, Manfred Stickel, Martin Haas, Uwe Herbstmeier, Ulrich Klaas, Dietrich Lemke: <i>The Small Magellanic Cloud in the far infrared: new ISO results</i>	235
Richard J. Tuffs, Cristina C. Popescu: <i>Far-infrared emission from dust in normal galaxies</i>	239
Ulrich Klaas, Martin Haas, Philip J. Richards, Helen J. Walker, Karsten Wilke: <i>Extragalactic research with ISOPHOT pipeline products</i>	247
Dieter Lutz: <i>ISO spectroscopy of bright galactic nuclei</i>	251
Martin Haas: <i>Luminous dust emission in active galaxies as seen by ISO</i>	257

Aprajita Verma, Dieter Lutz, Eckhard Sturm, Amiel Sternberg, Reinhard Genzel: <i>A MIR spectroscopic survey of starburst galaxies</i>	263
Ralf Siebenmorgen, Wolfram Freudling, Endrik Krügel: <i>Mid-IR radiation of 3C radio galaxies: I. observations and models</i>	267
Wolfram Freudling, Ralf Siebenmorgen: <i>Mid-IR radiation of 3C radio galaxies: II. results</i>	271
Caroline Bot, François Boulanger, Koryo Okumura, Bertrand Stepnik: <i>Multi-wavelength analysis of the dust emission in the Small Magellanic Cloud</i>	275
Alessandra Contursi, James Brauher, George Helou: <i>Investigating the [CII]-PAHs relation in a large sample of local galaxies</i>	279
Martin Haas, Ulrich Klaas, Simone Bianchi: <i>What powers the PAH emission in galaxies?</i>	283
Oliver Krause, Ute Lisenfeld, Ulrich Klaas, Dietrich Lemke, Manfred Stickel: <i>ISOPHOT's Serendipity Survey unveils an unusual ultraluminous infrared galaxy</i>	285
Manfred Stickel: <i>The complex far-infrared morphology of M86</i>	289
Pasquale Temi, William G. Mathews, Fabrizio Brighenti, Jesse D. Bregman: <i>Far infrared emission from elliptical galaxies: NGC 4649, NGC 4472, and NGC 4636</i>	293
Petri Väisänen, Thierry Morel: <i>Infrared colours of star-forming galaxies and a flux calibration of ISOCAM ELAIS catalogues</i>	297
Aprajita Verma, Michael Rowan-Robinson, Richard McMahon, Andreas Efstathiou: <i>ISO photometry of hyperluminous infrared galaxies: implications for the origin of their extreme luminosities</i>	301
Cosmology and Deep Surveys	
Hervé Dole: <i>ISO and the cosmic infrared background</i>	307
Dario Fadda, Carlo Lari, Giulia Rodighiero, David Elbaz, Hector Flores, Alberto Franceschini, Catherine Cesarsky, Ismael Perez-Fournon : <i>A mid-infrared look through the Lockman Hole</i>	313
Ricardo Perez-Martinez: <i>ISO lensing studies: background galaxies and foreground cluster properties</i>	317
Giulia Rodighiero, Dario Fadda, Alessandra Gregnanin, Carlo Lari, Alberto Franceschini: <i>A far-infrared view of the Lockman Hole from ISOPHOT</i>	321

Philippe Héraudeau, Carlos del Burgo, Manfred Stickel, Andreas Efstatiou, Michael Rowan-Robinson, Csaba Kiss, Péter Ábrahám, Sebastian Oliver, Ulrich Klaas, Dietrich Lemke: <i>The European Large Area Iso Survey: 90 micron number counts</i>	325
Technical Contributions	
Ronny Blomme, Mark C. Runacres: <i>The memory effect of the ISOPHOT-C100 detector</i>	331
Alain Coulais, Alain Abergel: <i>Frequently-asked questions about Fouks models and transient correction methods for the ISOCAM LW Detector</i>	335
Carlos del Burgo, Philippe Héraudeau, Péter Ábrahám: <i>Re-analysed steps of the ISOPHOT calibration scheme: reset interval correction, transient correction, and by-passing sky light subtraction</i>	339
Boris Fouks, Alain Coulais, Jonathan Normand: <i>Accurate physical model for direct modeling of point source transients for the ISOCAM LW detector</i>	343
Carlo Lari, Mattia Vaccari, Giulia Rodighiero, Dario Fadda, Carlotta Gruppioni, Francesca Pozzi, Alberto Franceschini, Gianni Zamorani : <i>The LARI method for ISO-CAM/PHOT data reduction and analysis</i>	349
Attila Moór, Péter Ábrahám, Csaba Kiss, Philippe Héraudeau, Carlos del Burgo : <i>Photometric investigation of the ISOPHOT C100 minimap mode</i>	353
Philip J. Richards, Ulrich Klaas: <i>Development of the ISOPHOT pipeline during the Active Archive Phase</i>	357
Bernhard Schulz, Nanyao Lu, Sibylle B. Peschke, Carlos Gabriel, Iffat Khan, René J. Laureijs: <i>P32Tools: Reduction of ISOPHOT P32 oversampled maps</i>	361
Richard J. Tuffs, Carlos Gabriel: <i>Photometric mapping with ISOPHOT using the “P32” Astronomical Observation Template</i>	365
Object Index	371
Author Index	379
List of Participants	381

FOREWORD

At the beginning of the year 2002 the ISO project entered a new phase, the 'Active Archive Phase', supported by ESA until 2006, during which the data can be fully exploited after they have been successfully collected during the 2.5 years of operations and carefully calibrated during the following 3.5 years. The calibration of the ISO instruments has now converged for the bulk of the ISO data. The archive is populated with data processed to a high level of consistency, and the final Interactive Analysis systems continue to support hands-on interactive processing. The explanatory handbooks have also been released in their final versions, gathering all the information needed to make efficient use of ISO data.

An international conference devoted to the exploitation of the ISO data thus appeared quite timely to help define the direction of the work to be performed during this new phase.

As clearly stated by the title *Exploiting the ISO Data Archive*, the aim of the symposium was to encourage astronomers to benefit from the vast scientific potential still locked in the ISO Data Archive. The subtitle *Infrared Astronomy in the Internet Age* refers to the desire to highlight the complete accessibility of the ISO data, even from a small medieval town in central Spain such as Sigüenza.

The symposium was organised with the following objectives in mind:

- to offer the opportunity to present new results obtained with ISO, with special emphasis given to the generation of catalogues, to projects involving large data sets or systematic data reduction, or any project making use of the data with a different purpose to that planned in the original proposal;
- to be a platform to expose new ideas for such projects and to establish new collaborations;
- to encourage new projects by providing inventories of the scientific content of the archive;
- to advertise the relevance of the ISO Data Archive for the use of future infrared science facilities (Herschel, SIRTF, ASTRO-F, SOFIA, ...) and solicit suggestions to make the archive more useful in this respect;
- to facilitate the use of the archive by offering information on the different tools available to work with ISO data and by addressing the relationship of the archive to other data bases and virtual observatories.

All these points were covered by the active participation of close to 100 scientists from 13 countries, who gave an equal number of contributions and data handling demonstrations. The presentations revealed the existence of many systematic data reduction projects and highlighted the interest of the participants for the ingestion of expert-reduced data into the archive as one of the main goals of the Active Archive Phase. The high scientific quality of the presentations at the conference and of these proceedings emphasises the continuing vivid interest of the community in ISO data and in mining the wealth of its archive in particular.

We hope you will enjoy reading these proceedings and may they inspire your future projects.

The Editors

