

# Workshop on Adaptive Optics-Assisted Integral-Field Spectroscopy

Integral-field spectroscopy and adaptive optics (AO) techniques are coming of age. A number of integral-field spectrographs are in operation around the world, and AO instruments are proliferating and becoming a standard feature of in particular the largest ground-based telescopes. The combination of integral-field spectrographs and AO is still a relatively unexplored area where the potential benefits for astronomy are huge. For that reason, a number of projects are under way that will take advantage of the most recent technological developments in these areas.

The advent of a new facility instrument at the 4.2-m William Herschel Telescope, the OASIS Integral Field Spectrograph, working in conjunction with the NAOMI Adaptive Optics system has prompted this initiative for holding a workshop covering this area. Moreover, a laser guide star facility is currently under development, which will open up nearly the full sky to AO exploitation. This implies a huge new potential for AO assisted spectroscopy to be carried out on large samples of objects, as there no longer will be the restriction of having to have a nearby bright guide star.

The workshop will focus on the scientific achievements and prospects for AO-assisted integral-field spectroscopy, promoting discussion and sharing of experiences and ideas. The outcome could inspire new collaborations and ideas for observing programmes, while at the same time it would provide the observatory with scientifically inspired advice on how to maximally exploit the exciting possibilities of AO at the Willam Herschel Telescope.

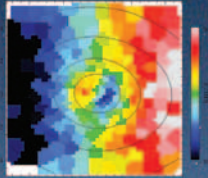
The workshop will be held from 9–11 May 2005 in Hotel H10 Taburiente Playa at Los Cancajos, La Palma. For further details see the workshop web pages at: <http://www.ing.iac.es/conferences/aoworkshop/>. □

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Workshop on

## ADAPTIVE OPTICS-ASSISTED INTEGRAL-FIELD SPECTROSCOPY

9-11 MAY 2005, LA PALMA, CANARY ISLANDS, SPAIN



OASIS IFS velocity map of NGC 4382  
(McBemid, R. et al. 2004, *Astron. J.* 125, 100)



The combination of integral-field spectroscopy and adaptive optics (AO) is still a relatively unexplored area where the potential benefits for astronomy are huge. Several projects are under way to take advantage of recent technological developments in these areas. This workshop is prompted by the advent at the 4.2-m William Herschel Telescope of the OASIS integral-field spectrograph in conjunction with the NAOMI AO system which will shortly be equipped with a laser guide star system.

The workshop will focus on the scientific potential of AO-assisted integral-field spectroscopy. Areas of interest will include the dynamics of galaxy cores, the physics of star-forming regions and dense stellar clusters, the impact of survey observations in these areas using laser guide stars, and future developments in instrumentation. Contributions in these and related areas are invited.


**Topics:**  
Astronomical Achievements of Integral-Field Spectroscopy  
Instrumentation Developments  
Future Prospects for Science Exploitation

**Scientific Organising Committee:**  
Roland Bacon, Chris Berrin, Thijs van der Hucht, Johan Knapen, Simon Morris, Raymar Peñalver, Rafael Pabolo, René Rutten, Tim de Zeeuw


**Local Organising Committee:**  
Chris Berrin, Javier Méndez, Roy Östensen, Samantha Rix, René Rutten

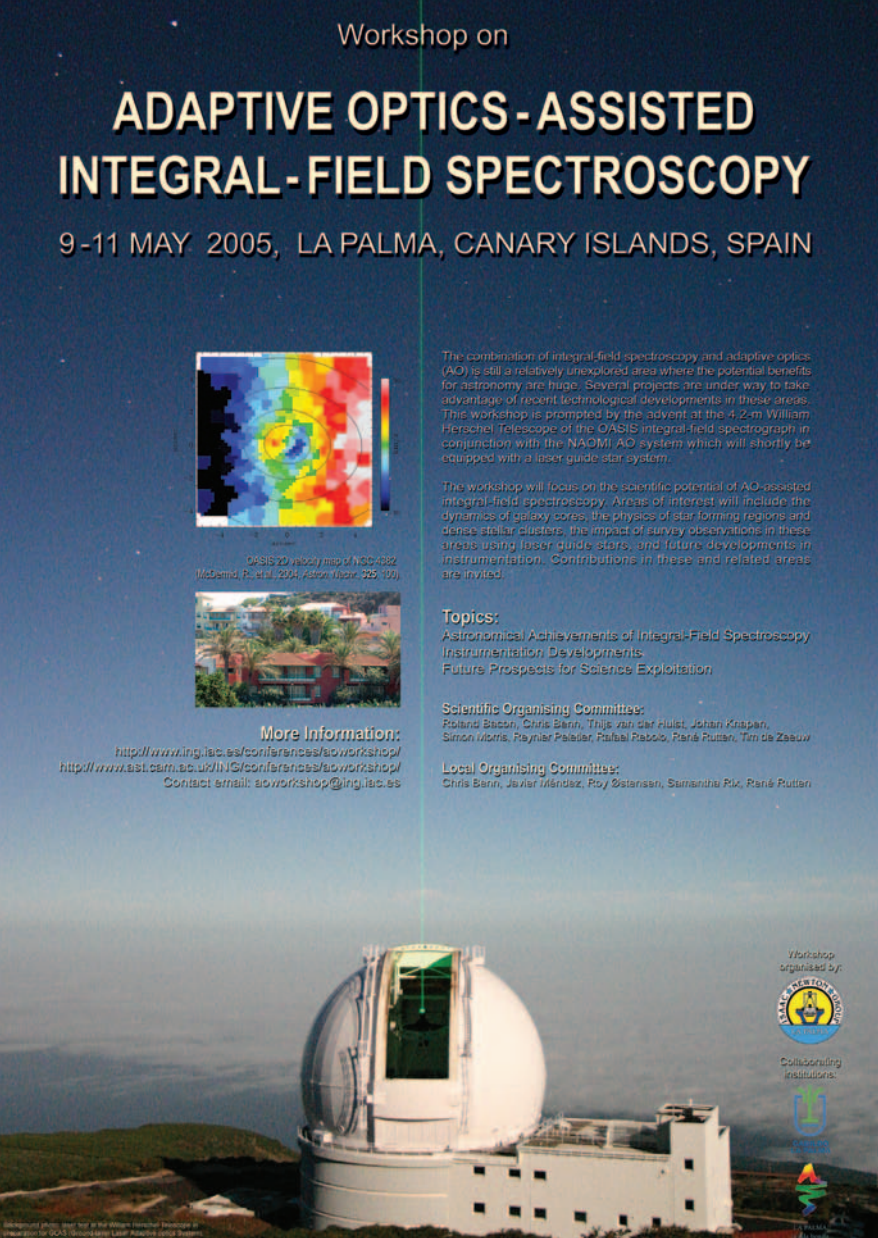
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Workshop organised by



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