



Starburst/Seyfert composite galaxies under the microscope

- What are composite galaxies?
- IRAS 00317-2142
- AO-assisted NIR integral field spectroscopy (Mrk 609)
- Future prospects

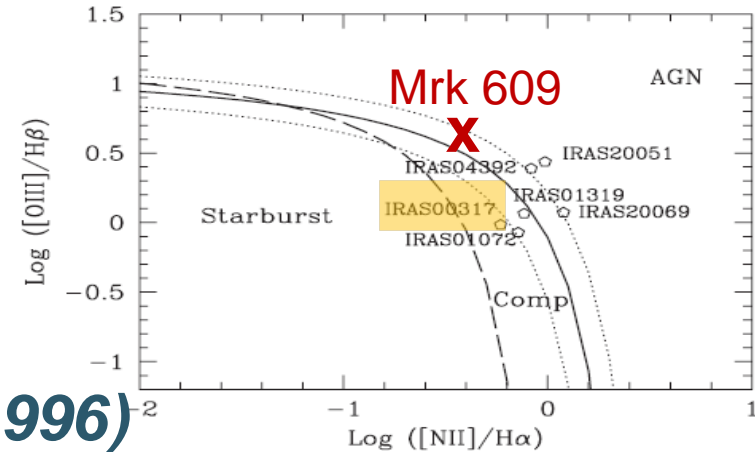
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MPI for Extraterrestrial Physics

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What are composite galaxies?

- ROSAT/IRAS match (*Moran+ 1996*)
- Visible- λ spectrum dominated by starburst features, while
- X-ray spectrum typical of those of Seyfert-1s
- no big-blue-bump



Interpretation: **AGN & star formation of similar strength**

1. reddening towards the nucleus
2. host outshines AGN (e.g., *Moran 2002, ApJ, 579*)
3. cold accretion (e.g., *Koratkar & Blaes, 1999, PASP, 111*)

(cf. *Moran+ 1996, ApJS, 106, 341; Panessa+ 2005, ApJ, 631, 707*)

The observational problem

- IRAS 00317-2124

- $z=0.0268$

- $1'' \sim 540\text{pc}$

- ISAAC SK

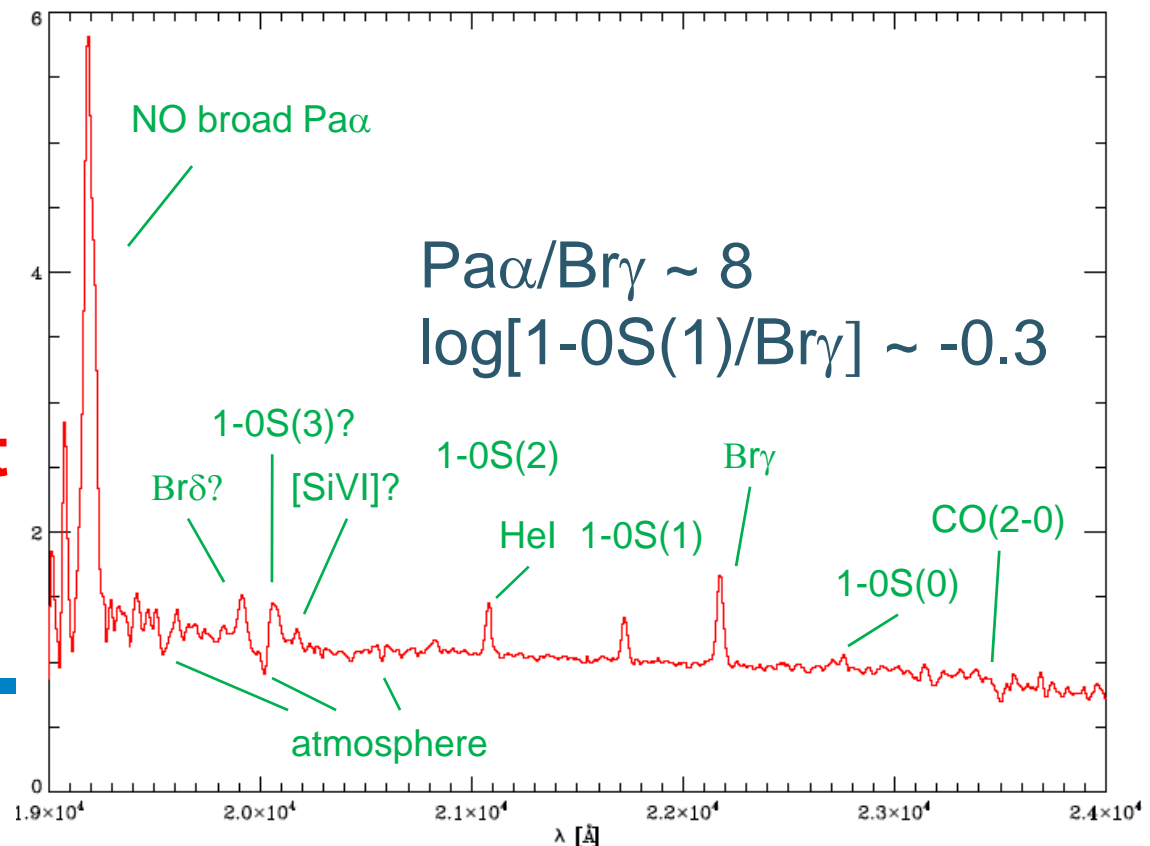
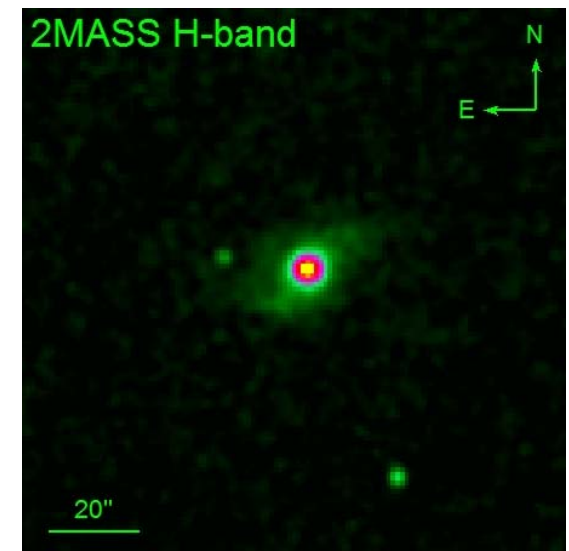
- $R \sim 500$

- $\text{FWHM} \sim 0.9''$

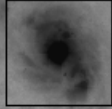
- **Reddening + luminous host**

- **No clear AGN**

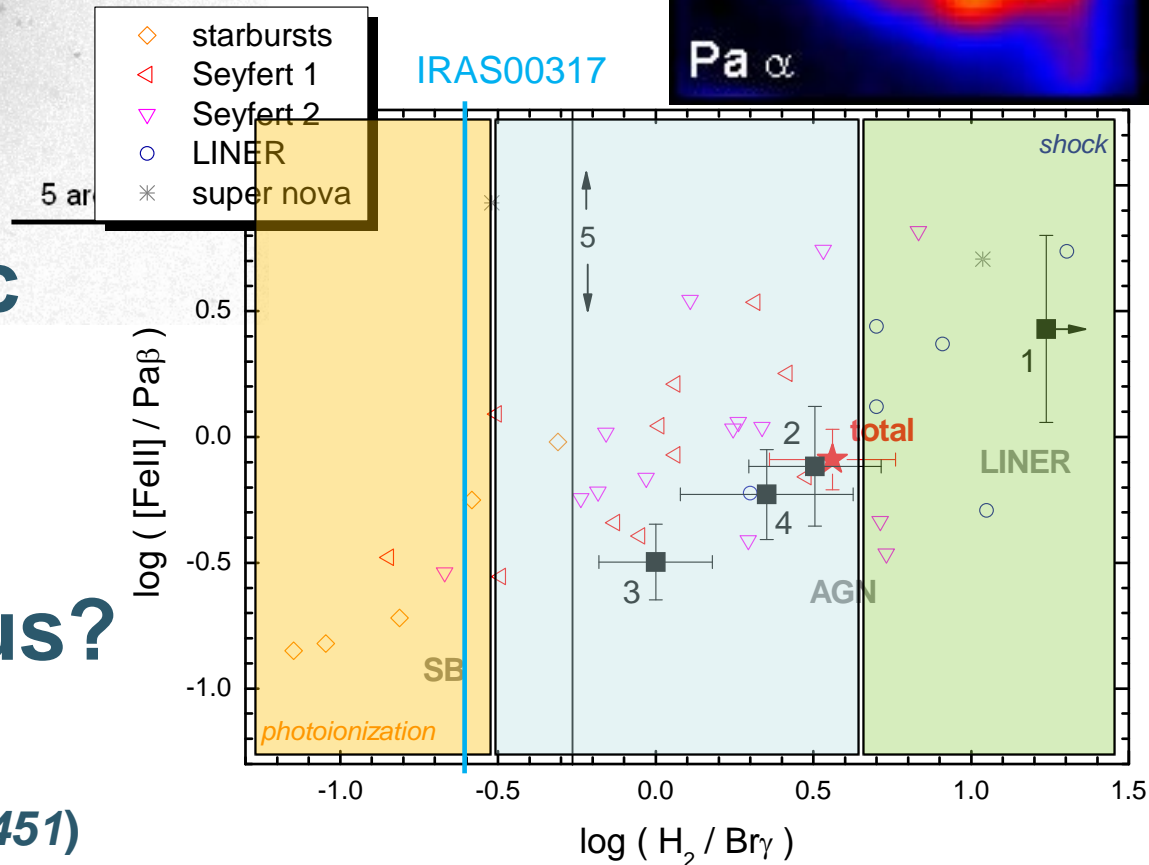
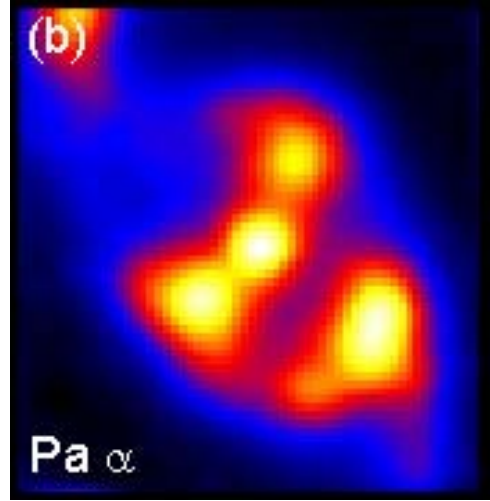
(Zuther+ in prep.)



Mrk 609 – SINFONI



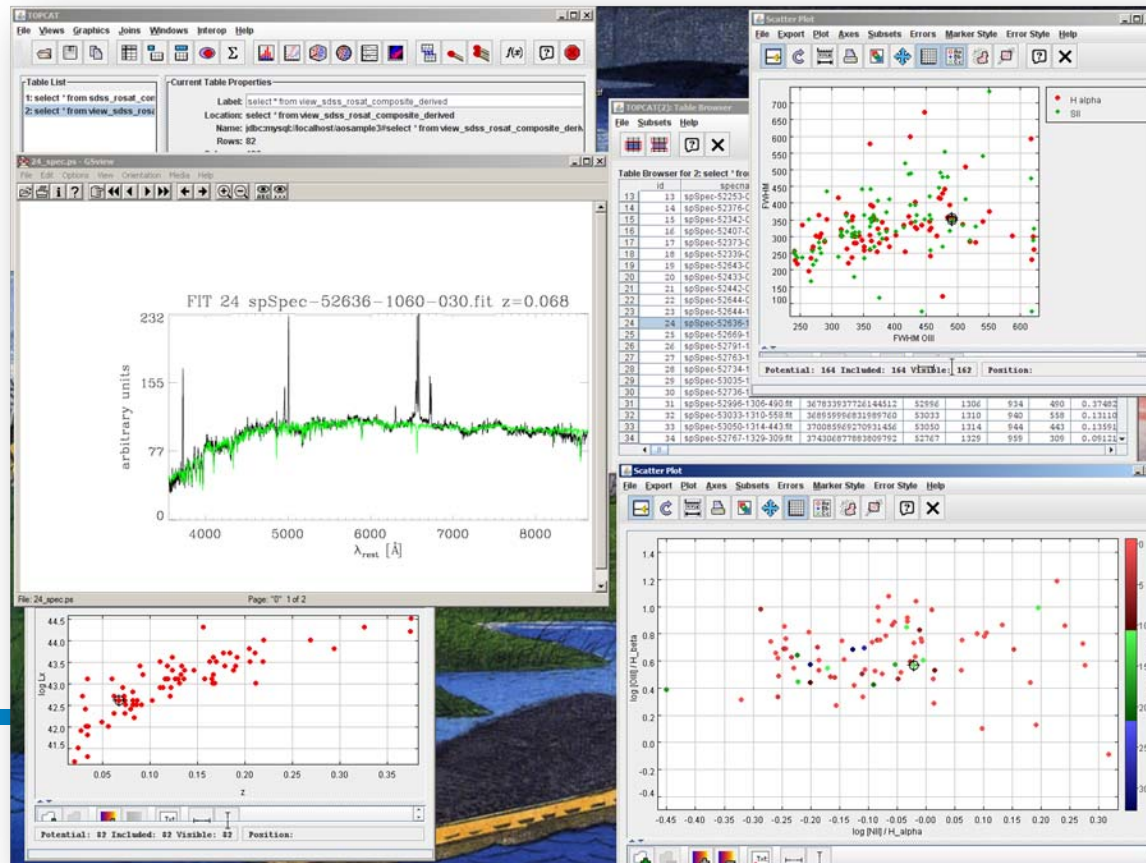
- $H+K$, $R \sim 1500$
- $z \sim 0.034$
- $\text{FWHM} \sim 270 \text{ pc}$
- Broad $\text{Pa}\alpha$ + $[\text{SiVI}]$
- LINER nucleus?



(Zuther+ 2007, A&A, 466, 451)

Prospects

- Composites have to be studied at high angular resolution \rightarrow IFU
- A rare but possibly important class of objects.
- Use VO to search for such sources (www.euro-vo.org).



EuroVO-DCA Workshop 2008 - Mozilla Firefox

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http://www.euro-vo.org/dcaworkshop2008/

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Memiam-Webster Unabridged

EuroVO-DCA Workshop 2008

EuroVO-DCA Workshop 2008

on how to publish data in the VO

23-27 June 2008 at ESO (Garching bei München, Germany)



Workshop

- Venue
- Program
- Participation
- Organisation
- Links
- Contact

Important Dates

- First announcement: **16 April 2008**
- Deadline for workshop registration: **23 May 2008**
- Workshop: **23-27 June 2008**

Purpose & Goals

The European Virtual Observatory (**EURO-VO**) project is organizing the second major workshop *on how to publish data to the VO* at **ESO** in Garching, near Munich, Germany on 23-27 June 2008. The Workshop will be held in the framework of the Euro-VO Data Centre Alliance (**EuroVO-DCA**) and Facility Centre. The workshop is particularly targetted at participants from astronomical data centres and larger projects in order to provide the knowledge and experience to enable them to publish a range of datasets to the Virtual Observatory (VO).

We encourage all astronomical data providers, including current and future facilities and large surveys, to participate in this workshop. There will be separate sessions to accomodate the different levels of technical expertise of participants.

The advantages of a VO-enabled archive

The VO is an international astronomical community-based initiative. To make it a reality, national organisations formed the International VO Alliance (**IVOA**) to agree common standards for data access and interoperability.

The VO aims to allow seamless access to distributed astronomical resources and to provide the necessary tools to analyse multi mission data simultaneously. In this context, access to and full interoperability between astronomical data of current ground-based and space-borne observatories is already now a key element of the VO.

What to learn at the workshop

In hands-on sessions, participants will be introduced to the basic VO protocols and tools required to publish their data holdings to the VO. We will also gather feedback from participants on the VO protocols and tools. See the **program** for details.

Participants are strongly encouraged to bring samples of their own data to the workshop or connect live where possible to existing services, so they can publish real science data and share expertise suited to their own projects in order to sustain permanent VO services for their own data centres.

The hands-on sessions will be focused on using systems developed for the task in hand. Participants must bring their own computers where required software (e.g. database and web servers) should be installed in advance where possible or ensure such services are accessible remotely before the workshop.

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