



Kinematics in Seyfert and Non-Active Galaxies.

Gaëlle Dumas

ARI, Liverpool John Moores University
CRAL, Observatoire de Lyon

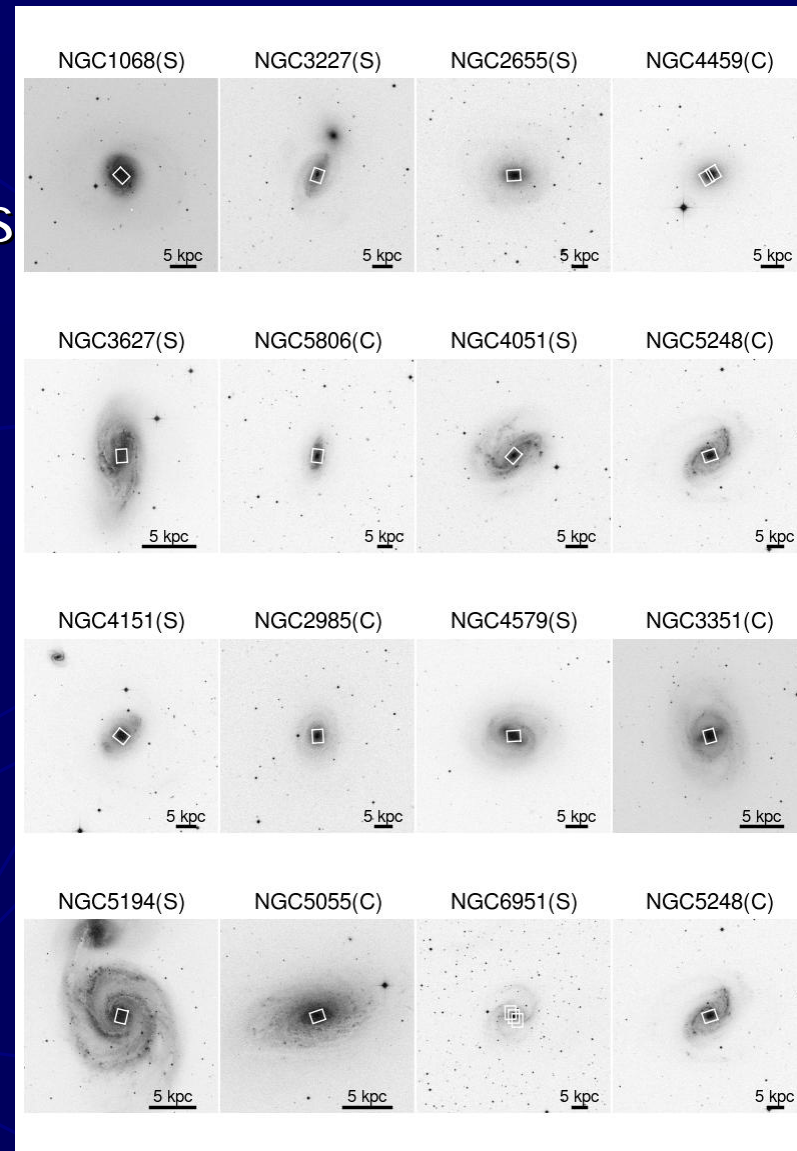
Carole G. Mundell (ARI), Eric Emsellem, Pierre Ferruit (CRAL), Neil Nagar (AG, Chile)

SAURON/Seyferts Survey

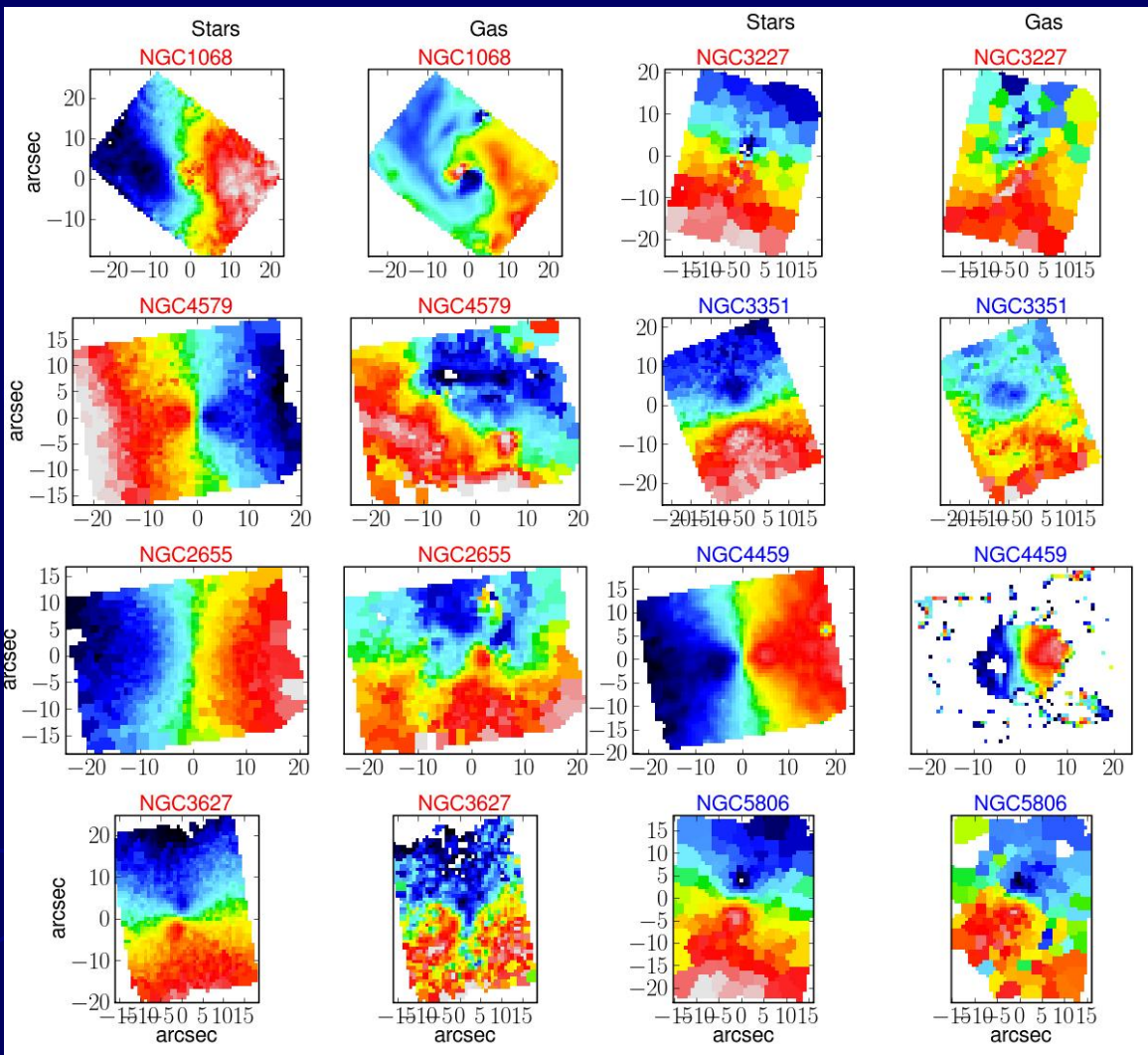
► Kinematic signatures of fuelling mechanisms
Differences Seyferts/non-active galaxies

► Sample : pairs
Seyferts + well-matched non-active galaxies

► IFS SAURON :
■ stars and ionised gas kinematics
■ FOV 33" x 42" : central kpc



Excerpts : Velocity fields



Dumas et al. 2007, MNRAS

- Stars rotation pattern

- Stars + Gas Twists & misalignments

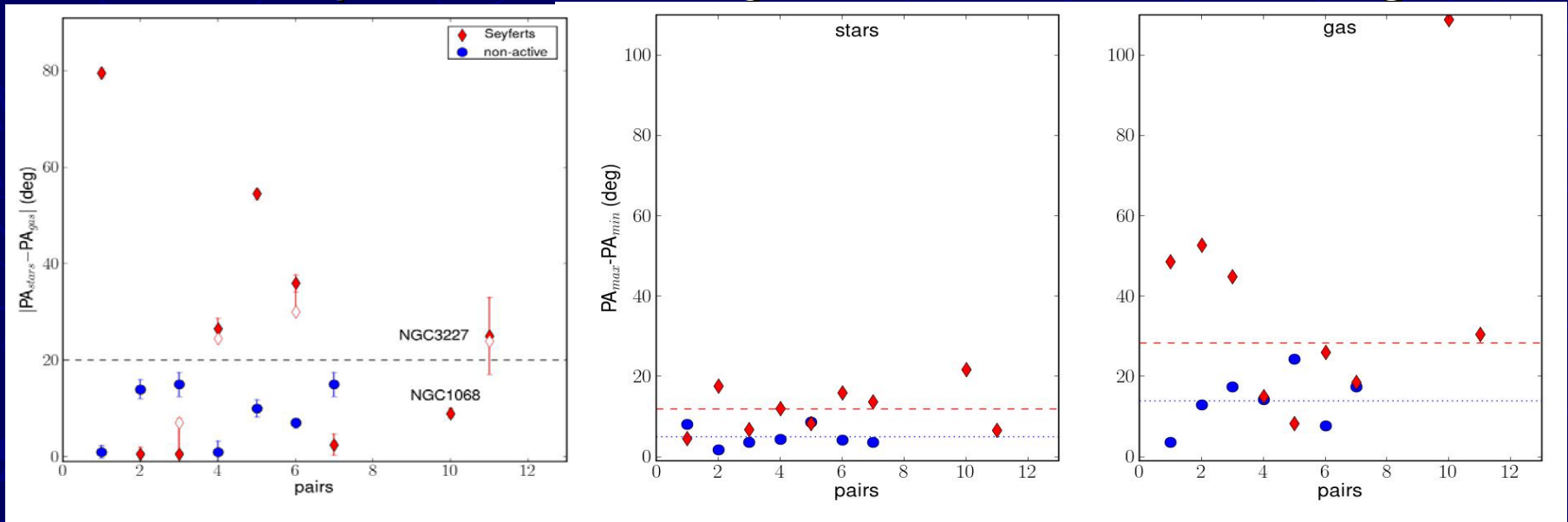
Quantifying Kinematic Structures

Kinematic PAs misalignments

- All control galaxies below 20°
- 57% Seyfert galaxies above 20°

Dumas et al. 2007, MNRAS

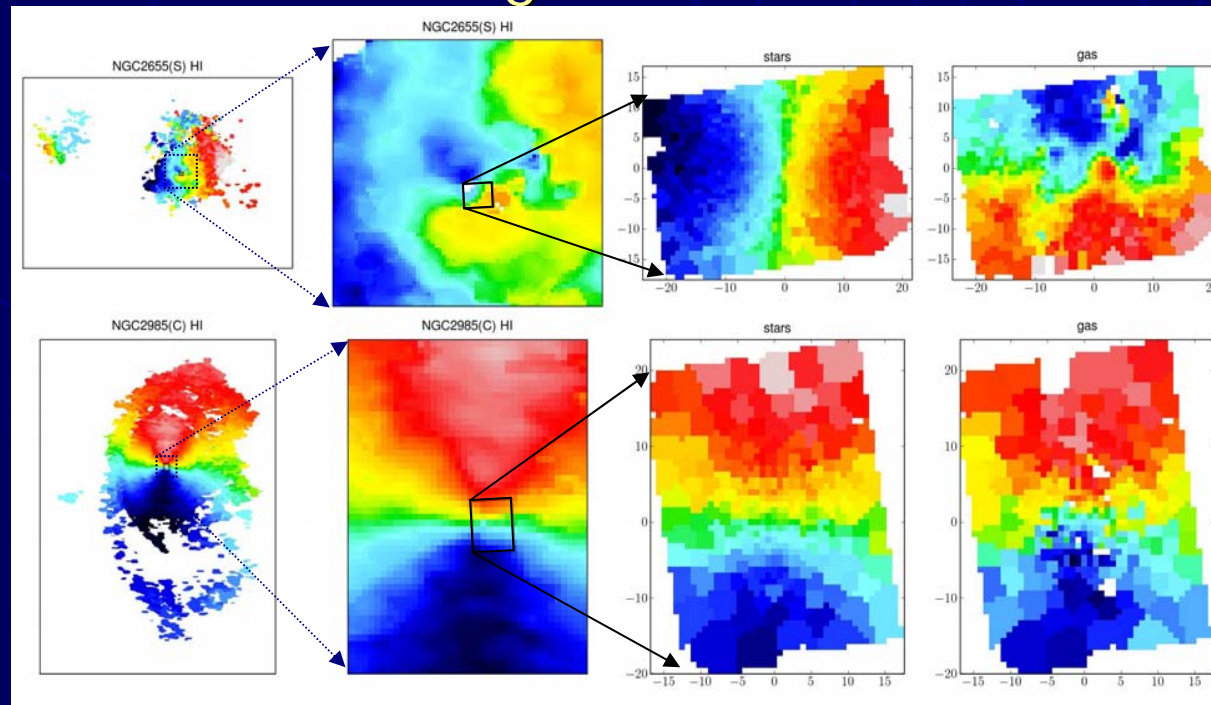
- ▶ Gas more perturbed than stars
- ▶ Gas more perturbed in Seyferts (circumnuclear regions)



Perspective

Spatial Scales and Gaseous Components

- ▶ Neutral Gas (VLA data, [Mundell et al. 2007](#)), full disk kinematics
- ▶ Ionised Gas (+stars), Circumnuclear regions
- ▶ Molecular Gas (CO data, NUGA survey)



➔ *Looking for Post-Doctoral Position !*

References

- ▶ Dumas et al. 2007, MNRAS, accepted

<http://arxiv.org/pdf/0705.4169>

Available at full resolution :

ftp://ftp-obs.univ-lyon1.fr/pub/gdumas/dumas_paper.pdf

- ▶ Mundell et al. 2007, New AR, 51, 34