

Обзор ArXiv/astro-ph,
4-9 мая 2016 года

От Сильченко О.К.

Astro-ph: 1605.01346

MEASUREMENT OF THE BLACK HOLE MASS IN NGC 1332 FROM ALMA OBSERVATIONS AT 0.044 ARCSECOND RESOLUTION

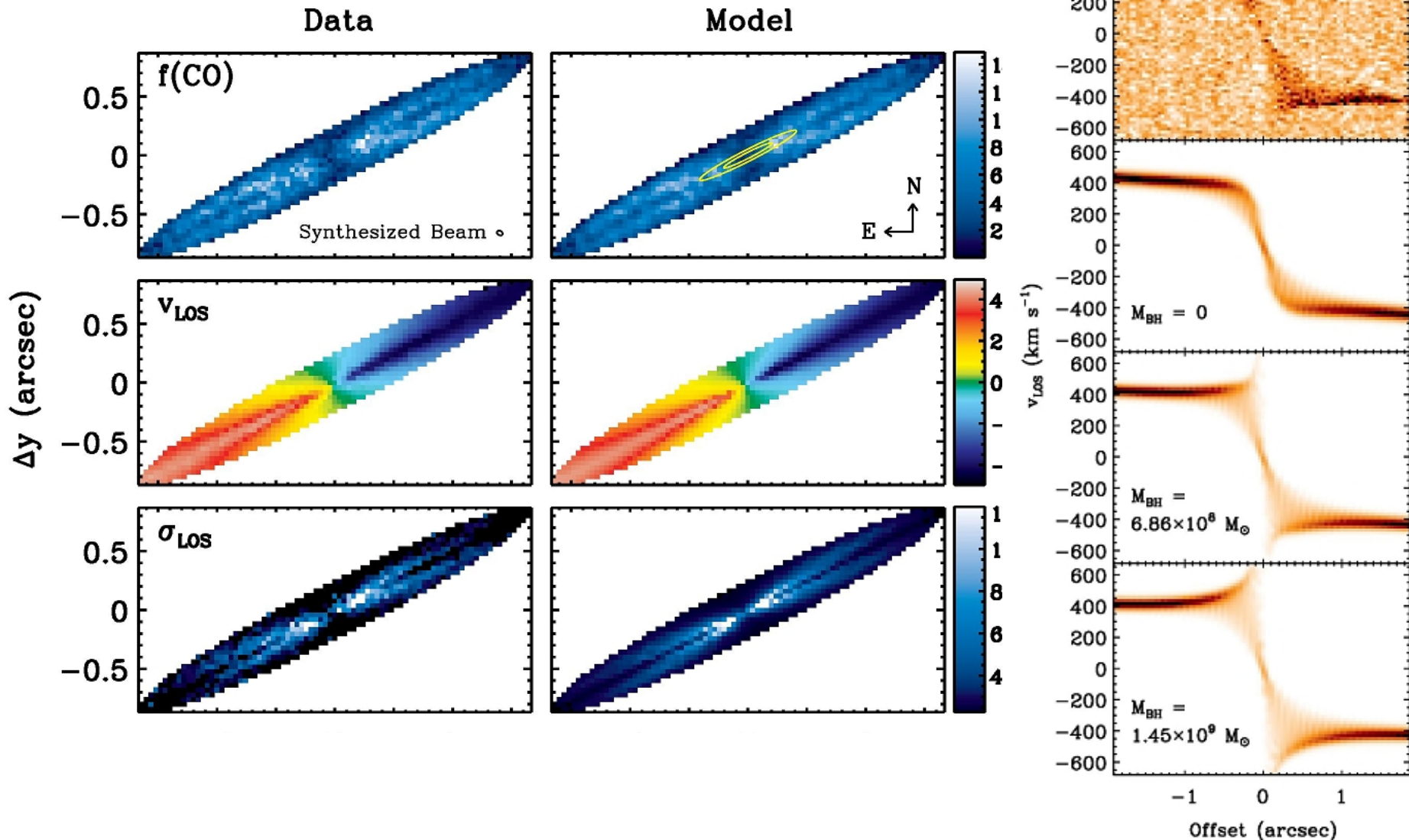
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Draft version May 5, 2016

ABSTRACT

We present Atacama Large Millimeter/submillimeter Array (ALMA) Cycle 3 observations of CO(2–1) emission from the circumnuclear disk in the E/S0 galaxy NGC 1332 at 0.''044 resolution. The disk exhibits regular

Черная дыра!



Astro-ph: 1605.01489

Mon. Not. R. Astron. Soc. **000**, 000–000 (2014)

Printed 6 May 2016

(MN L^AT_EX style file v2.2)

New Lessons from the HI Size-Mass Relation of Galaxies

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Данные – СВОИ И ЧУЖИЕ

Sample	N ^a	Type ^b	env ^c	reference
B97*	107	S, dIrr	-	Broeils & Rhee (1997)
WHISP (S)	59	S, dIrr	-	Swaters et al. (2002)
LVHIS ^d	56	S, dIrr	-	Koribalski (2008)
THINGS	19	S, dIrr	-	Walter et al. (2008)
Bluedisk	39	S	<i>iso</i>	Wang et al. (2013)
Diskmass*	28	S	-	Martinsson et al. (2016)
VGS	14	S	<i>v</i>	Kreckel et al. (2012)
Ursa Major*	38	S	<i>c</i>	Verheijen & Sancisi (2001)
VIVA	36	S	<i>c</i>	Chung et al. (2009)
LITTLE THINGS	39	dIrr	<i>iso</i>	Hunter et al. (2012)
K09*	23	dIrr	-	Kovač et al. (2009)
L14*	16	dIrr	-	Lelli et al. (2014)
FIGGS	25	dIrr	-	Begum et al. (2008)
WHISP (Sa)	41	Sa	-	Noordermeer et al. (2002)
Atlas3D	9	E/S0	-	Serra et al. (2012, 2014)

galaxy	D _{HI} kpc	log M _{HI} M _☉	distance Mpc	PA ^a deg	b/a ^b	M _B mag	D ₂₅ kpc
UGC731	15.20	8.87	8.0	-9.2	0.56	-13.08	5.09
UGC1281	9.76	8.51	5.5	-52.6	0.30	-15.89	7.15
UGC2023	12.98	8.65	10.1	-29.5	0.90	-15.50	4.99
UGC2034	18.57	8.93	10.1	-43.3	0.90	-15.25	7.34
UGC2053	12.94	8.75	11.8	-41.2	0.86	-15.16	7.01

Все на одной прямой...

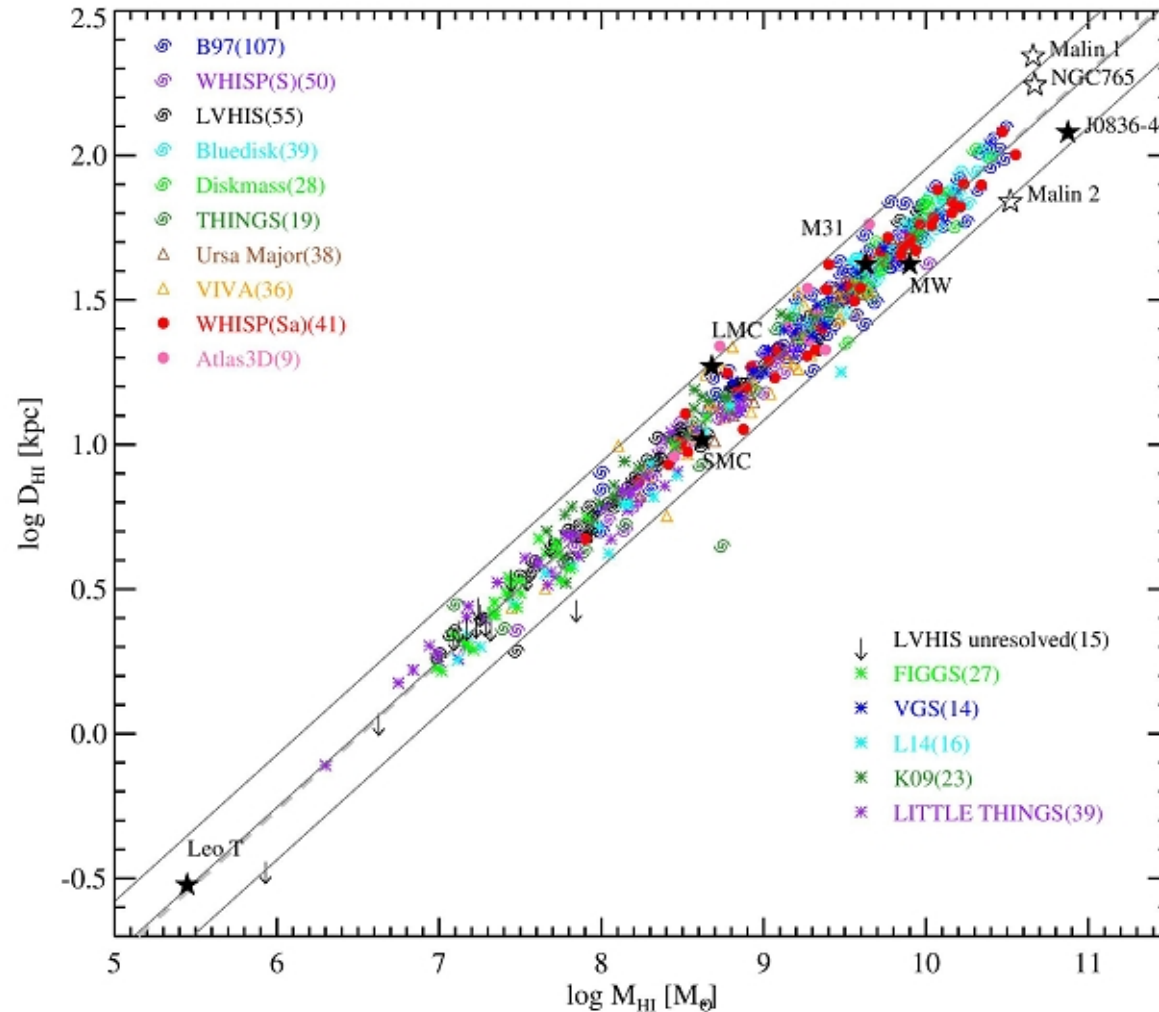
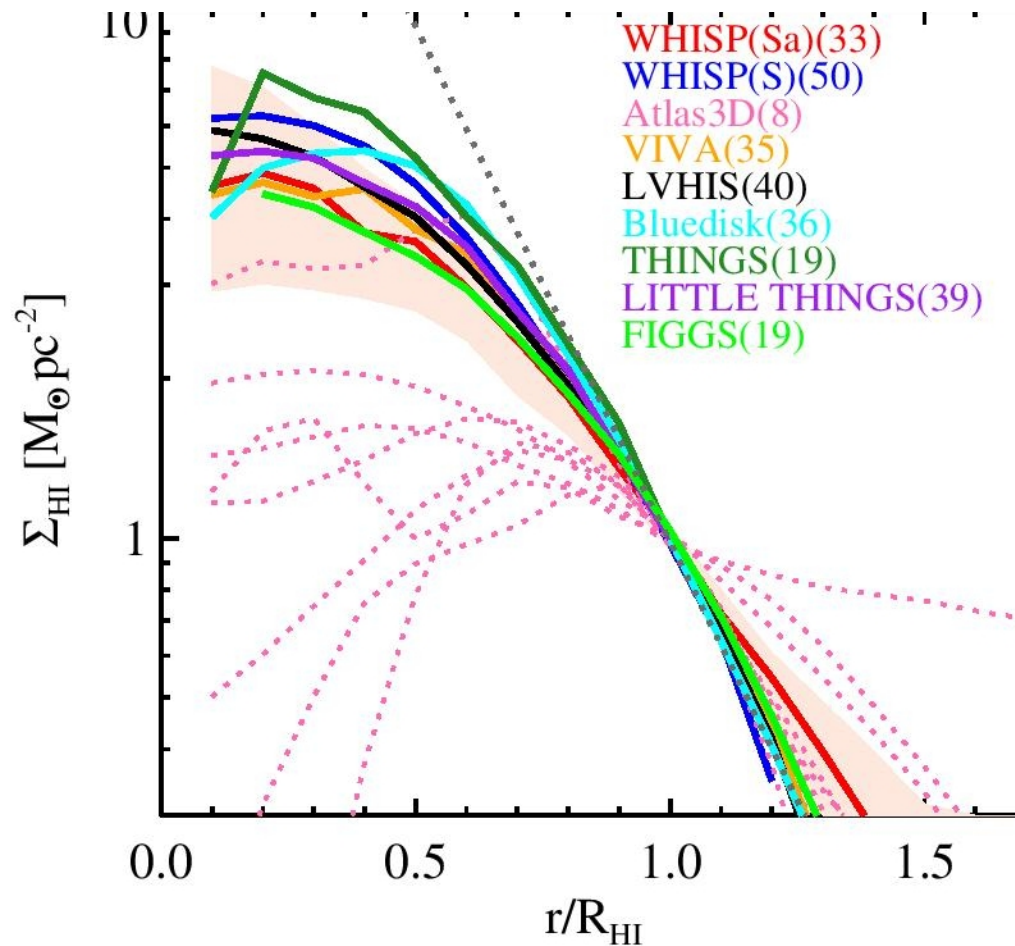
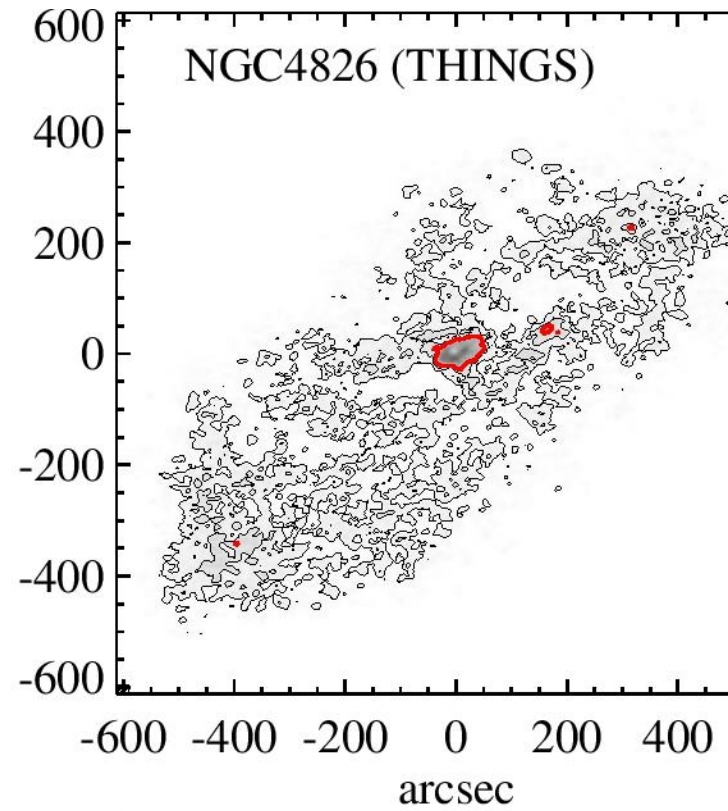
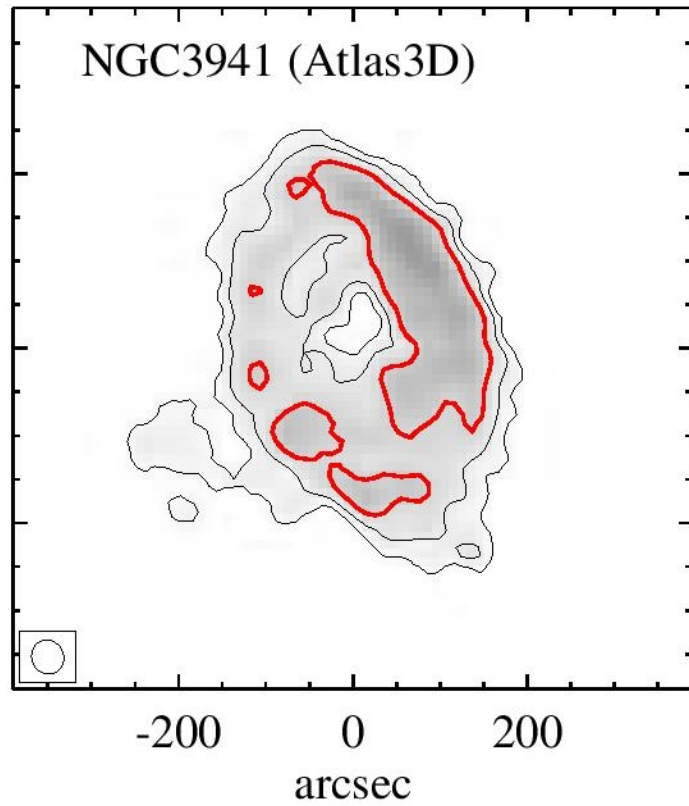


Figure 1. The $D_{\text{HI}}\text{-}M_{\text{HI}}$ relation for 562 galaxies from 15 interferometric data sets (see Table 1). We also show D_{HI} upper limits for 15 unresolved galaxies from LVHIS. Furthermore, nine special individual galaxies have been shown in stars (see Table 2). The solid lines represent the best-fit linear relation and the $3\text{-}\sigma$ scatter. The dashed line represents the B97 relation.

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Outliers



Astro-ph: 1605.01058

The Spatially Resolved Dynamics of Dusty Starburst Galaxies in a $z \sim 0.4$ Cluster: Beginning the Transition from Spirals to S0s

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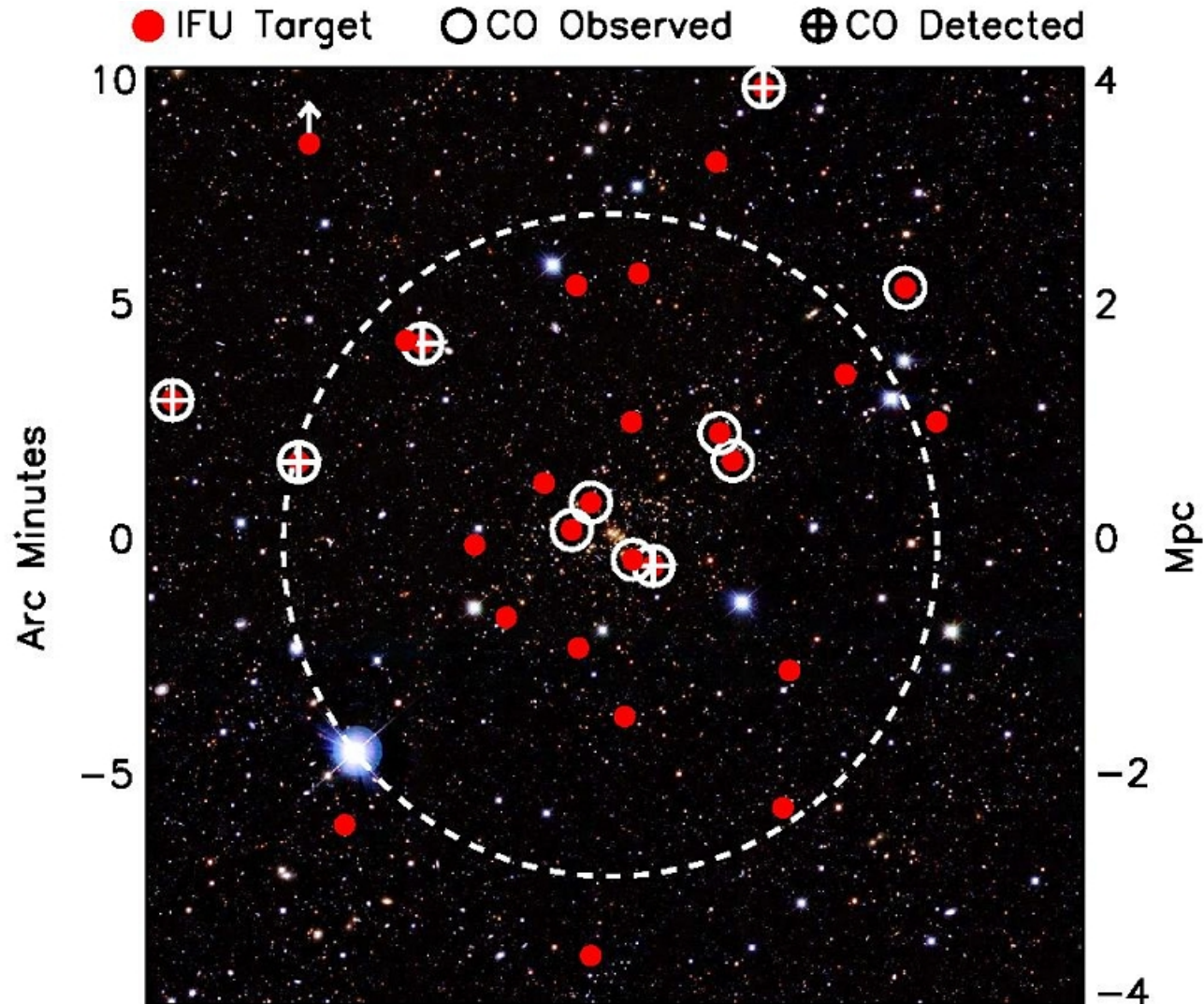
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Accepted XXX. Received YYY; in original form ZZZ

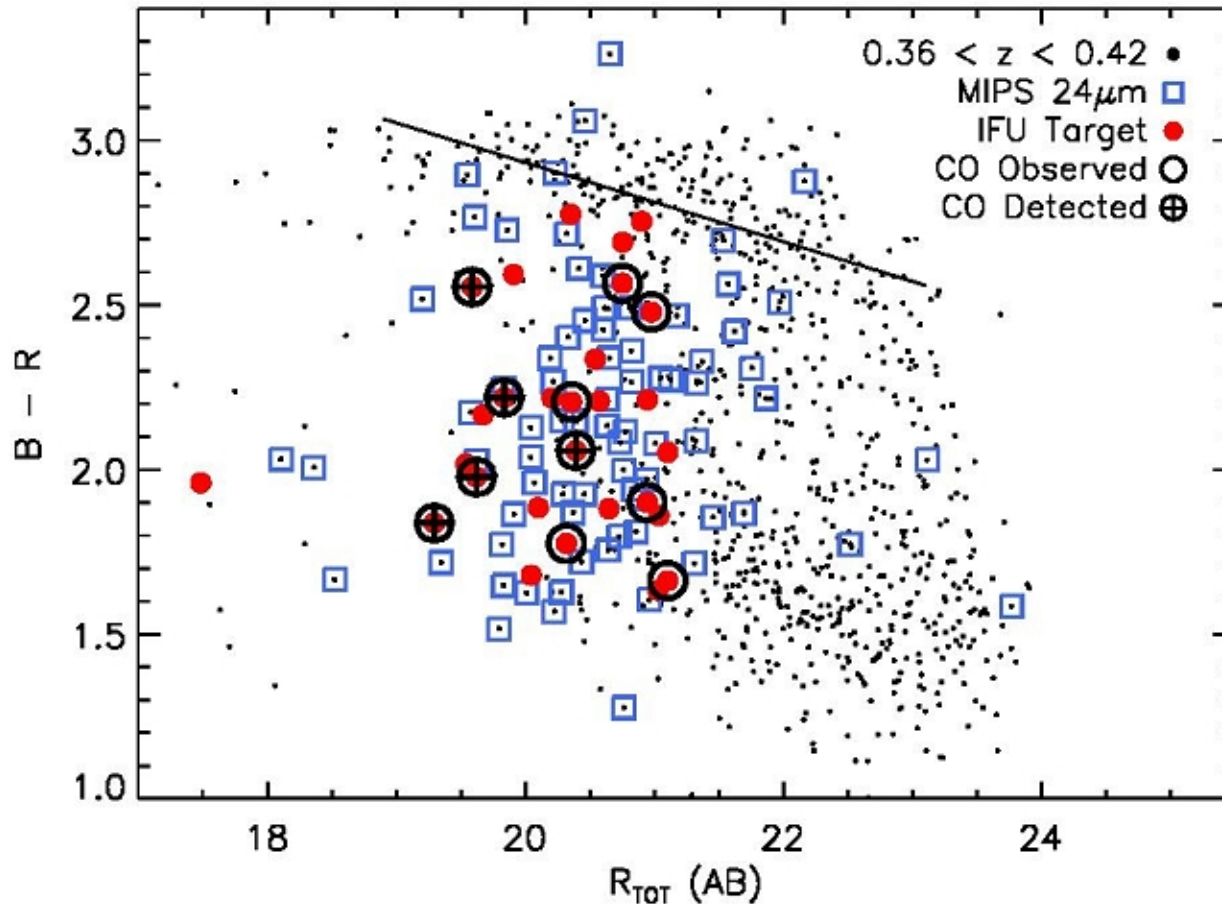
ABSTRACT

To investigate what drives the reversal of the morphology–density relation at intermediate/high redshift, we present a multi-wavelength analysis of 27 dusty starburst galaxies in the massive cluster Cl0024+17 at $z=0.4$. We combine $H\alpha$ dynamical maps from the VLT / FLAMES multi-IFU system with far-infrared imaging using *Herschel* / SPIRE and millimeter spectroscopy from IRAM / NOEMA, in order to measure the dynamics, star formation rates and gas masses of this sample. Most galaxies appear

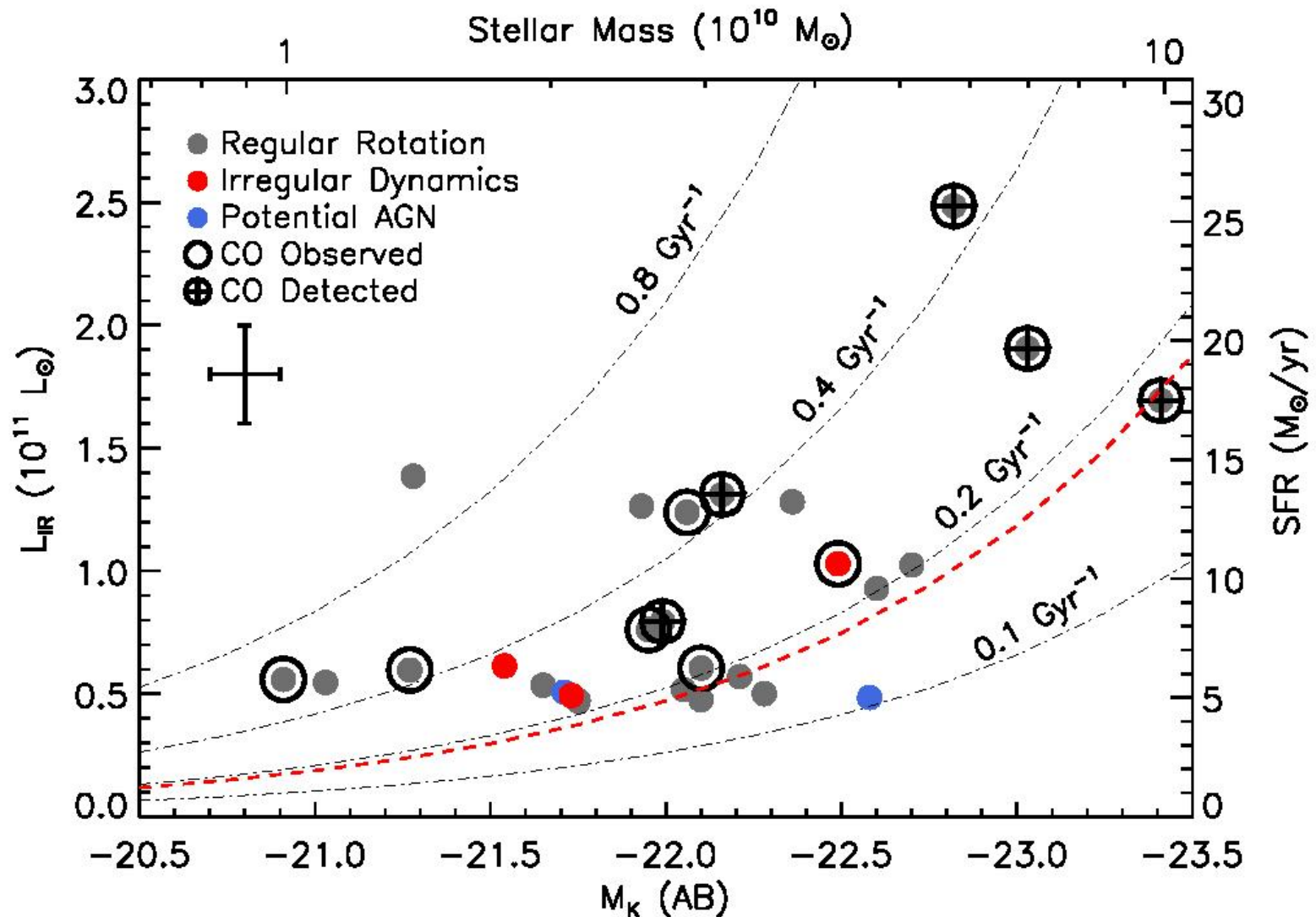
Далекое скопление на $z=0.4$



Зеленая долина-голубое облако



Темпы звездообразования



Диагноз...

