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От Сильченко О.К.

# Astro-ph: 1609.03559

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## **Spatially resolved variations of the IMF mass normalisation in early-type galaxies as probed by molecular gas kinematics**

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<sup>2</sup>*Department of Physics and Astronomy, Macquarie University, Sydney, NSW 2109, Australia*

<sup>3</sup>*Australian Astronomical Observatory, PO Box 915, Sydney, NSW 1670, Australia*

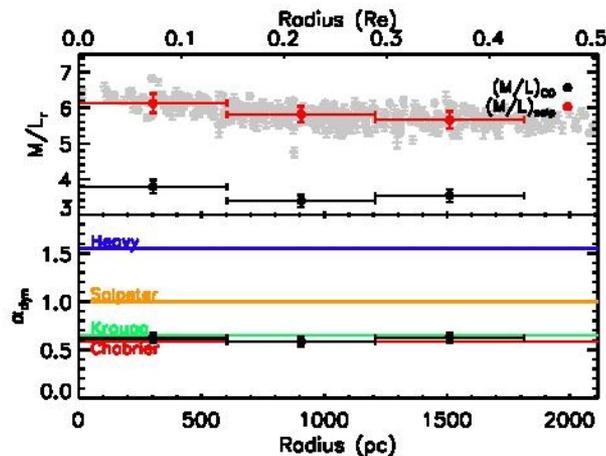
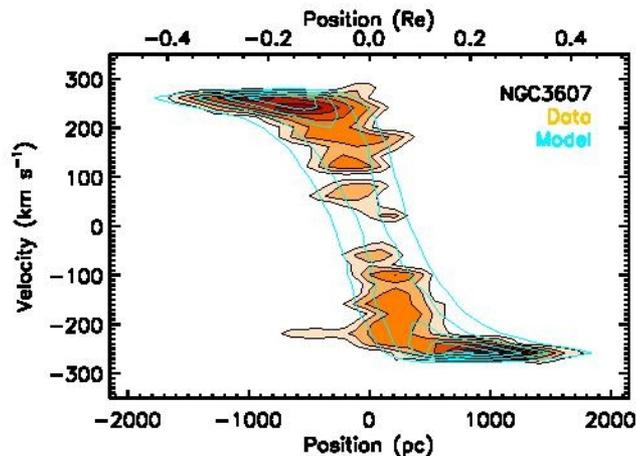
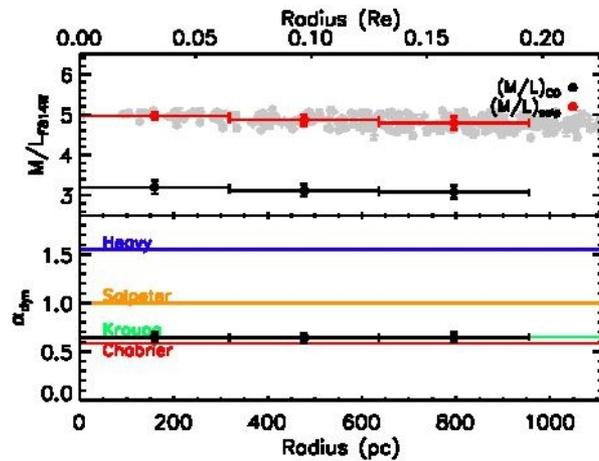
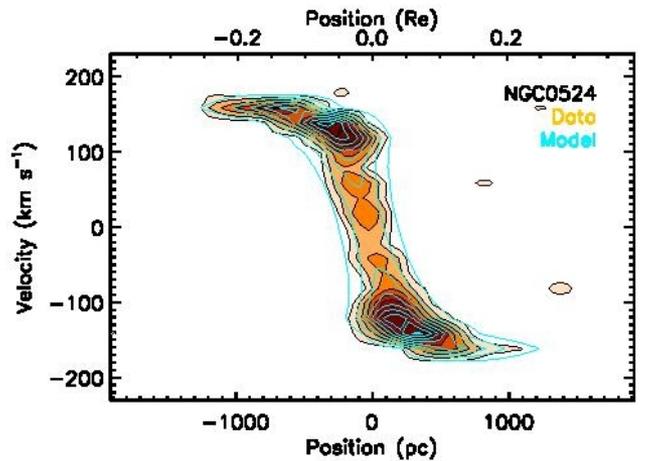
# Выборка галактик ранних типов из ATLAS-3D с молекулярным газом

**Table 1.** Properties of the ETGs included in this study

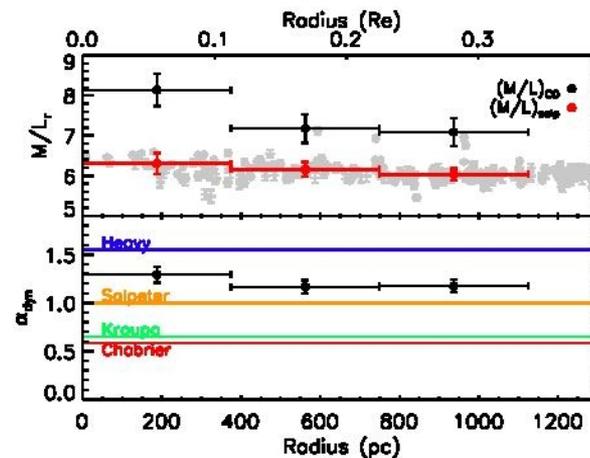
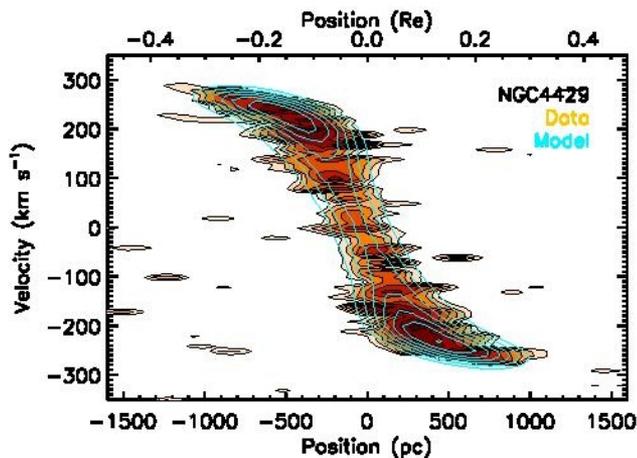
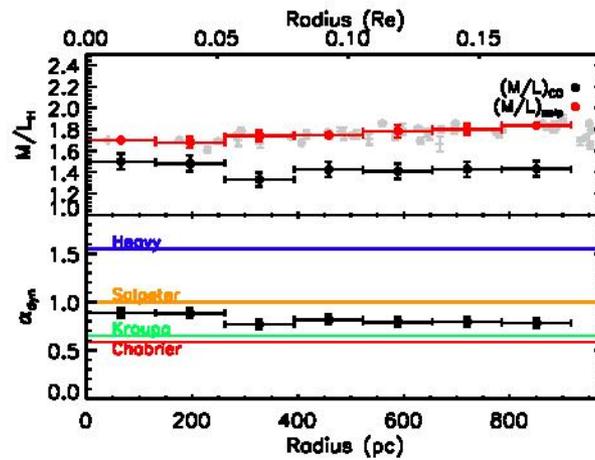
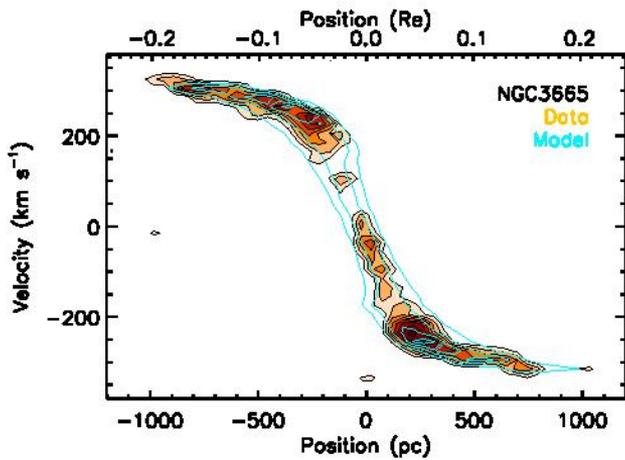
Name	Distance (Mpc)	$M_{K_s}$ (mag)	$\sigma_e$ ( $\text{km s}^{-1}$ )	$R_e$ (kpc)	$R_{\text{max}}/R_e$	$\log_{10}(M_{\text{gas}}/M_*)$	$\alpha_{\text{dyn}}$ (C+12)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
NGC0524	23.3	-24.71	220	4.9	0.49	-3.43	0.60
NGC3607	22.2	-24.74	206	4.1	0.21	-2.84	0.72
NGC3665	33.1	-24.92	216	5.0	0.51	-2.44	0.96
NGC4429	16.5	-24.32	177	3.3	0.52	-2.78	0.92
NGC4459	16.1	-23.89	158	2.8	0.13	-2.67	0.70
NGC4526	16.4	-24.62	208	3.5	0.35	-2.65	0.94
IC0719	29.4	-22.70	128	1.8	1.11	-2.29	*2.06

*Notes:* Column 1 lists the name of each source. Column 2 to 5 are the distance,  $K_s$ -band absolute magnitude, velocity dispersion within one effective radius, and effective radius of each object. These are reproduced from Cappellari et al. (2011) and Cappellari et al. (2013). Column 6 contains the ratio of  $R_{\text{max}}$  (the radius at which the rotation profile becomes flat; these figures taken from Davis et al. 2014) to the effective radius  $R_e$ . Column 7 lists the gas fraction (molecular plus atomic) within the inner regions of these objects, as described in Davis et al. (2014). The stellar mass used here is the dynamical mass derived from jeans modelling in Cappellari et al. (2013). Column 8 contains the  $\alpha_{\text{dyn}}$  value derived by Cappellari et al. (2012). A star denotes values of  $\alpha_{\text{dyn}}$  considered unreliable by Cappellari et al. (2012) due to the presence of strong population gradients.

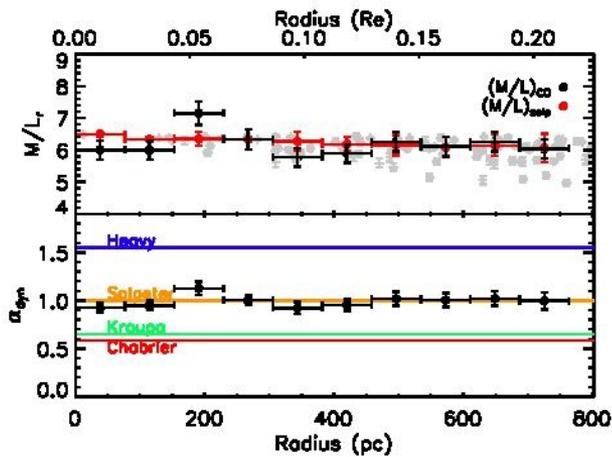
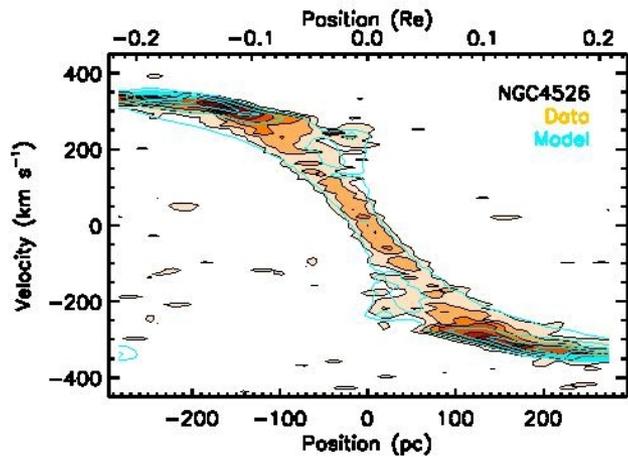
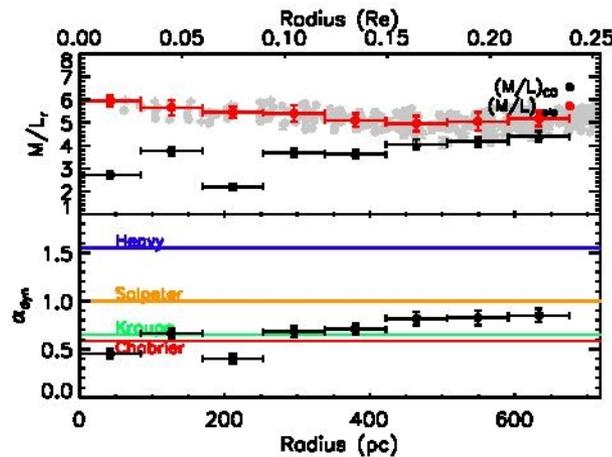
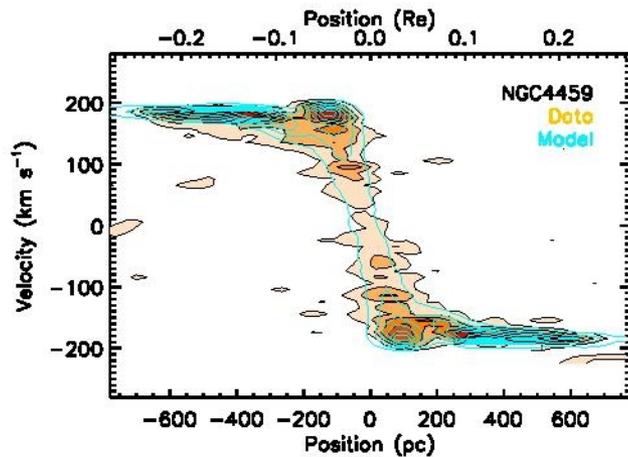
# Данные по СО и отношению масса/светимость – вдоль радиуса



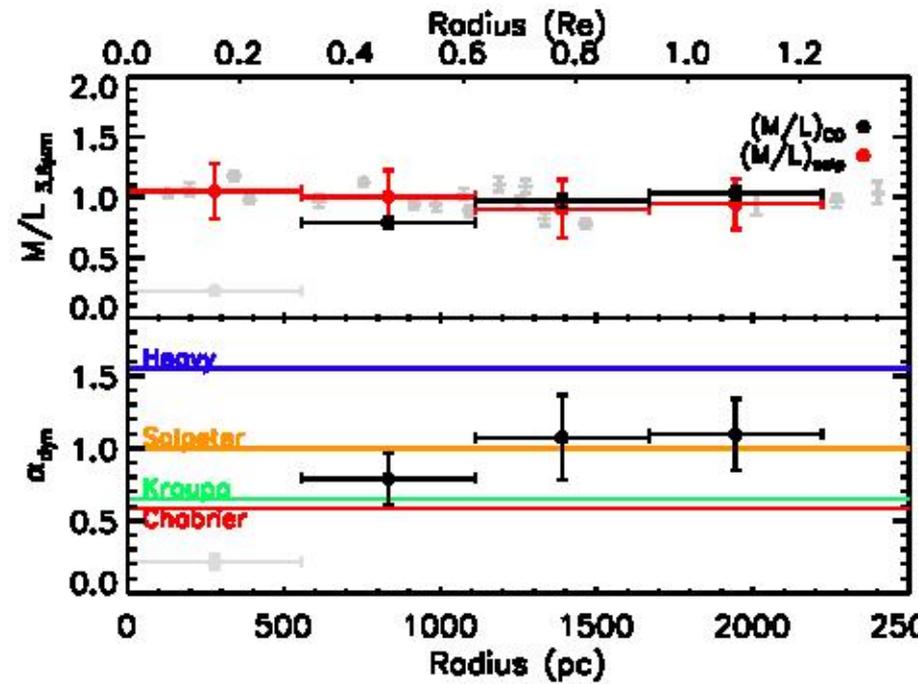
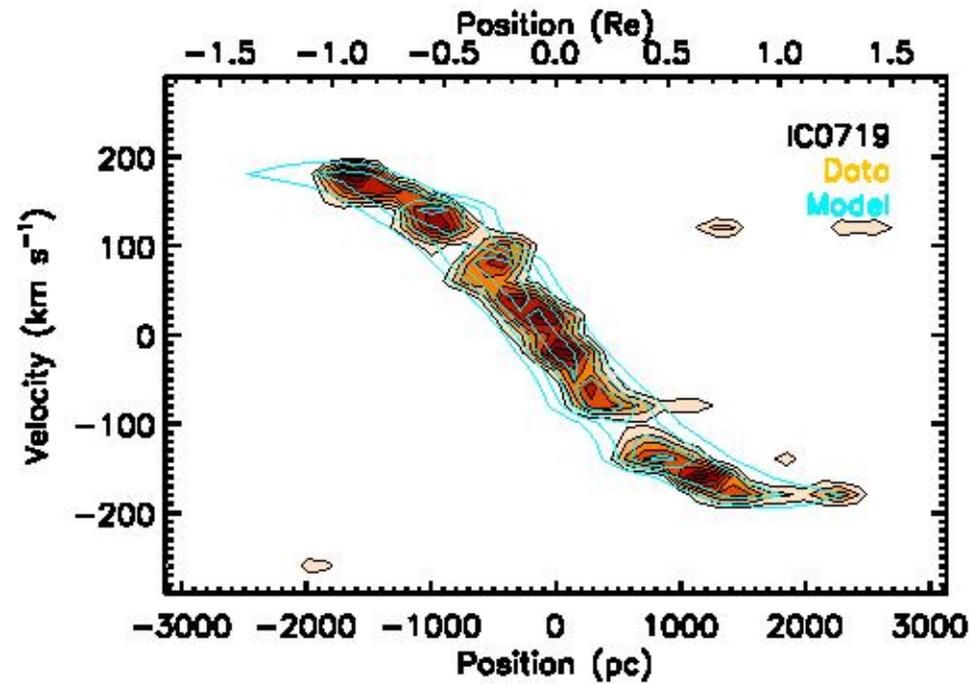
# Данные по СО и отношению масса/светимость – вдоль радиуса



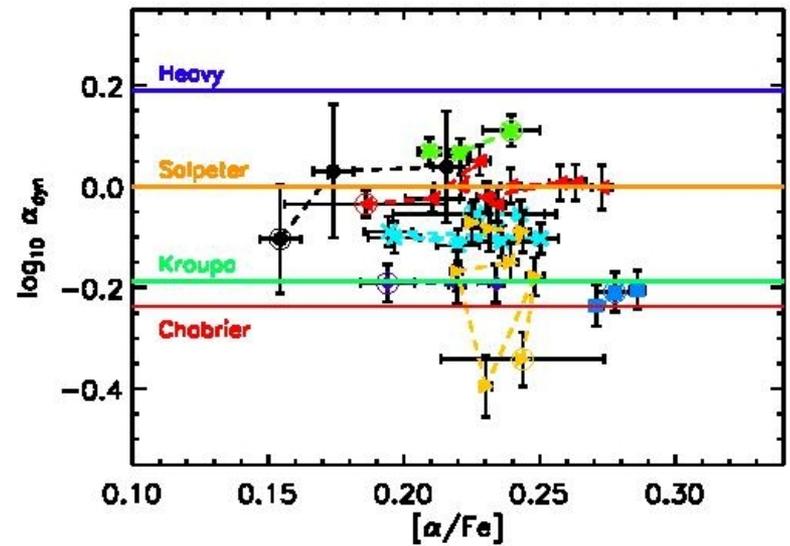
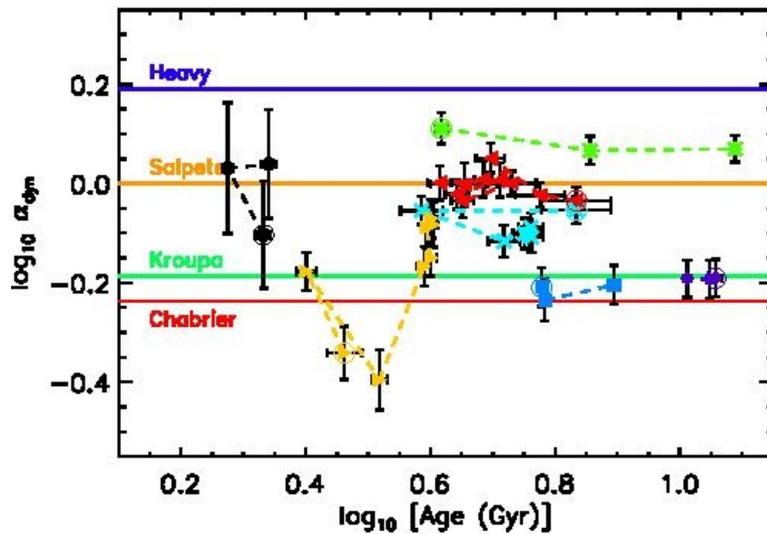
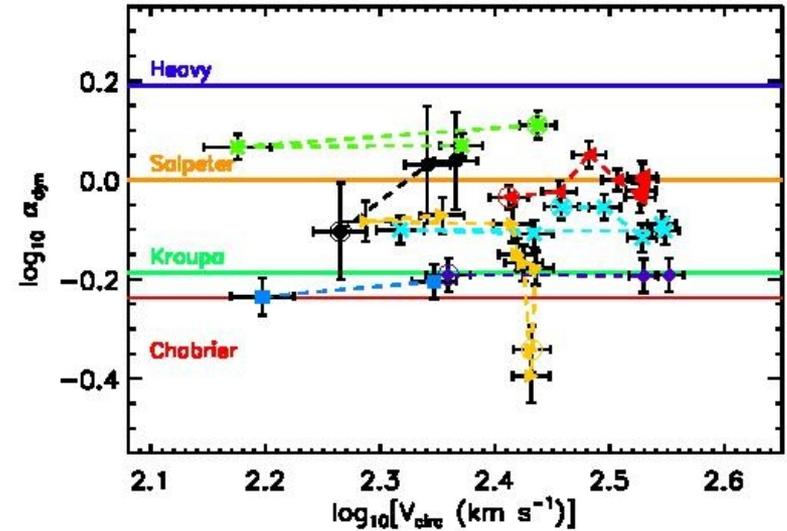
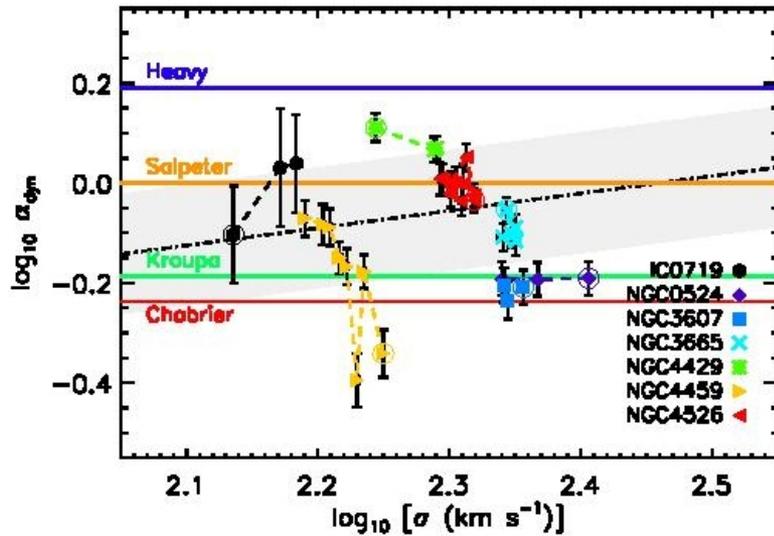
# Данные по СО и отношению масса/светимость – вдоль радиуса



# Данные по СО и отношению масса/светимость – вдоль радиуса



# Никаких корреляций!



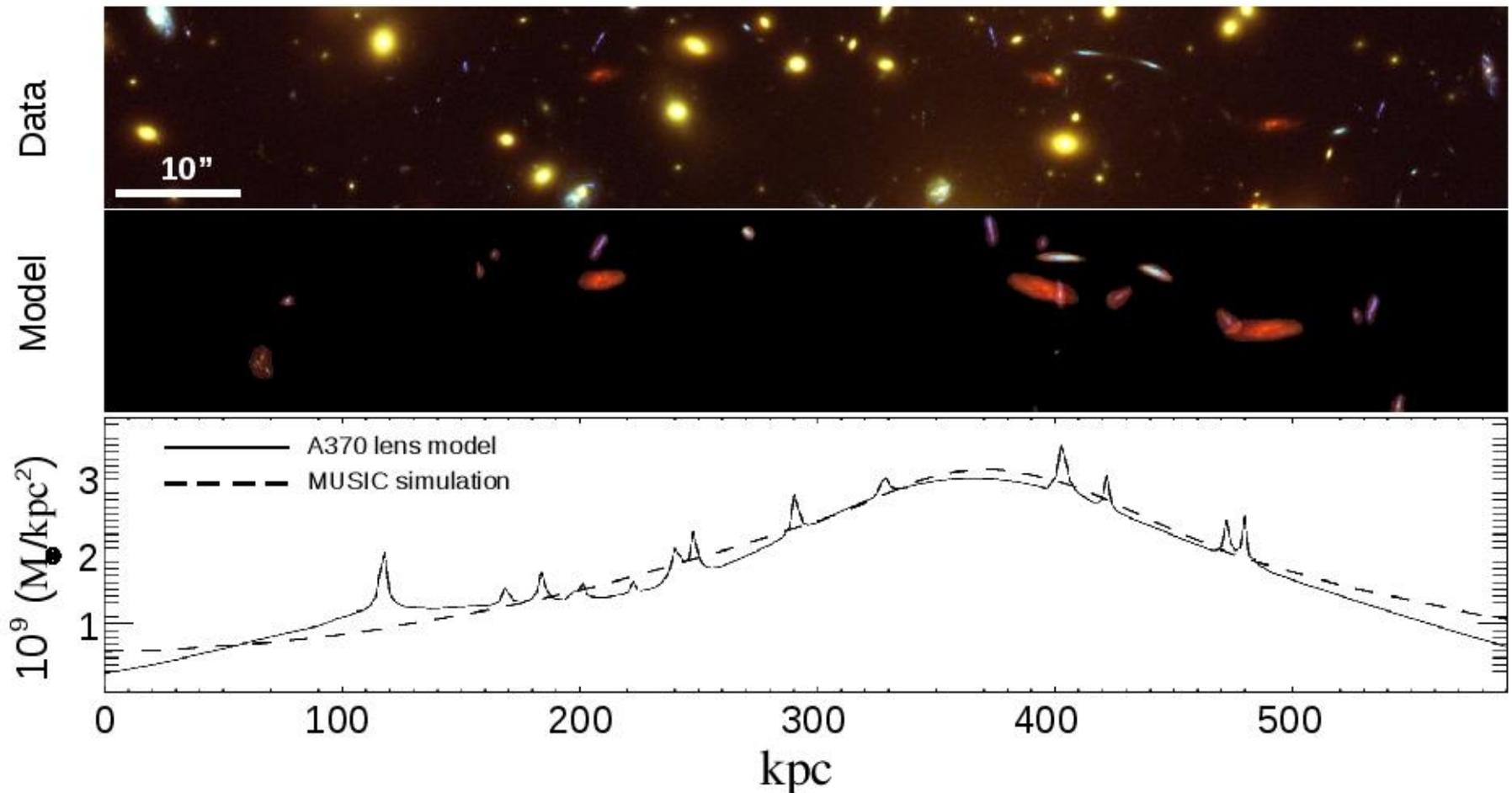
# Astro-ph: 1609.04822

**A free-form lensing model of A370 revealing stellar mass dominated BCGs, in Hubble Frontier Fields images.**

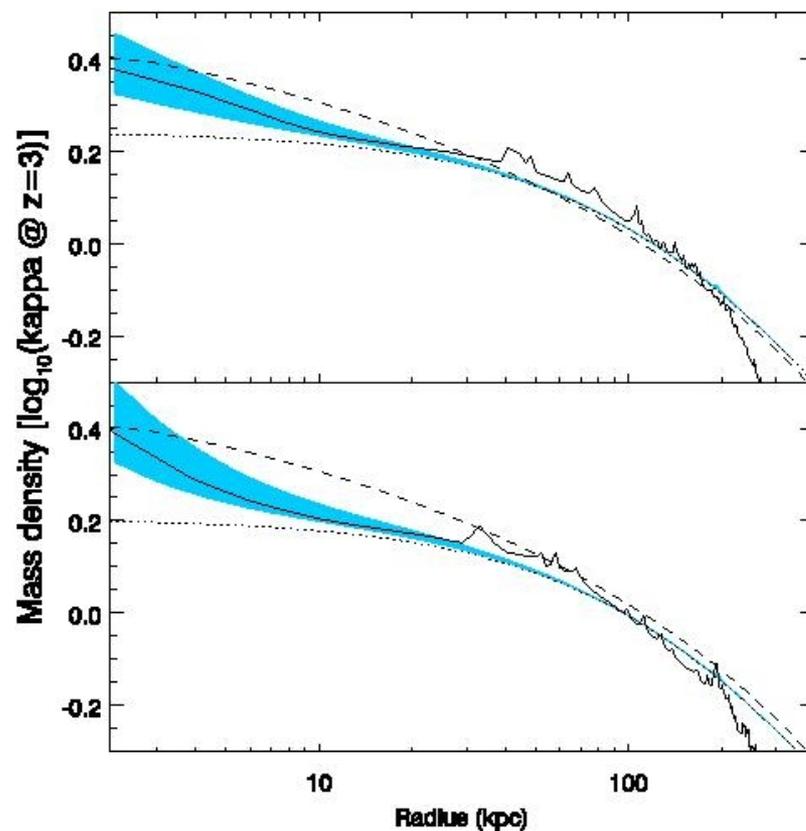
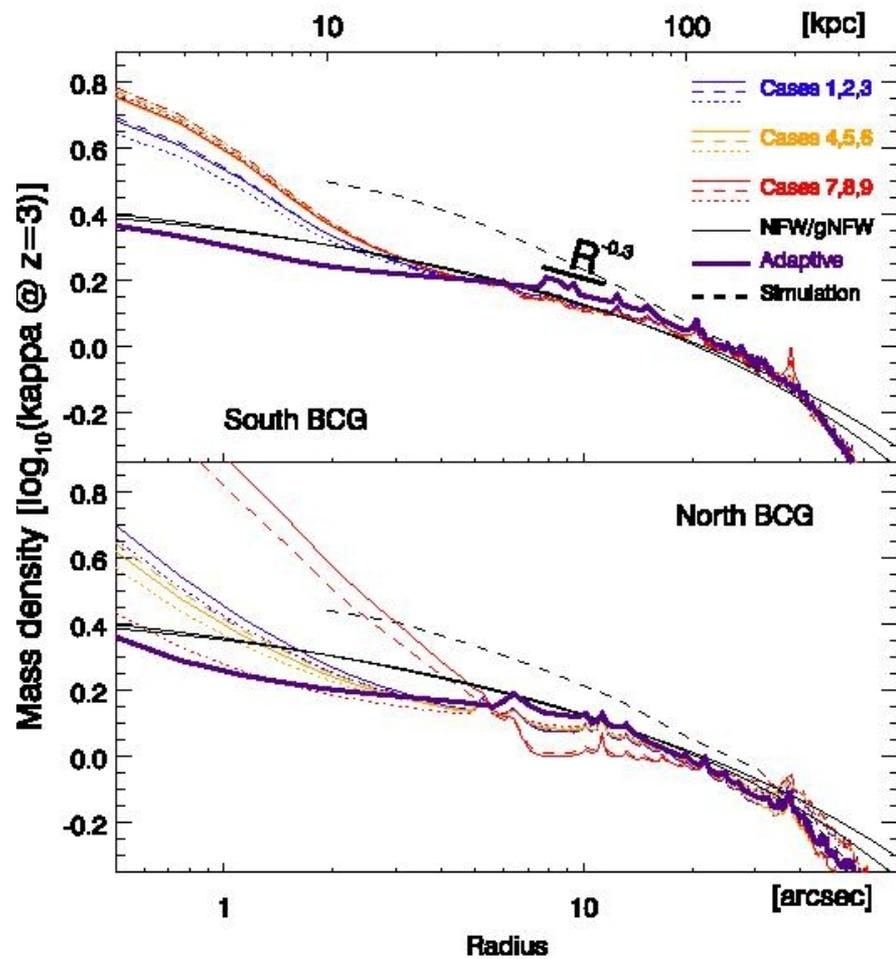
Jose M. Diego<sup>\*1</sup>, Kasper B. Schmidt<sup>2</sup>, Tom Broadhurst<sup>3,4</sup>, Daniel Lam<sup>5</sup>,  
Jesús Vega-Ferrero<sup>6,11</sup>, Wei Zheng<sup>7</sup>, Slanger Lee<sup>12</sup>, Takahiro Morishita<sup>8,9,10</sup>,  
Gary Bernstein<sup>11</sup>, Jeremy Lim<sup>12,13</sup>, Joseph Silk<sup>7,14,15,16</sup>, Holland Ford<sup>7</sup>



# Реконструкция распределения плотности по множественным линзам



# В центре BCG доминируют звезды!



# Astro-ph: 1609.04920

## The Void Galaxy Survey: photometry, structure and identity of void galaxies

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R. van de Weygaert,<sup>1</sup> J. H. van Gorkom,<sup>4</sup> M. A. Aragon-Calvo<sup>5</sup>

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<sup>5</sup>*University of California, 900 University Avenue, Riverside, CA 92521, USA*

<sup>6</sup>*Physics and Centre for Space Research, North-West University, Potchefstroom, South Africa*

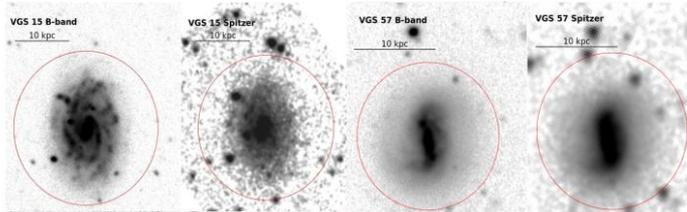
Last updated 2016 January 7

### ABSTRACT

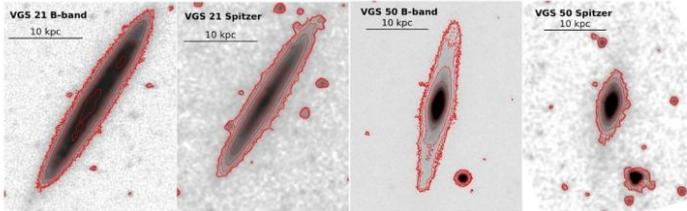
We analyze photometry from deep B-band images of 59 void galaxies in the Void Galaxy Survey (VGS), together with their near-infrared  $3.6\mu\text{m}$  and  $4.5\mu\text{m}$  Spitzer photometry. The VGS galaxies constitute a sample of void galaxies that were selected by a geometric-topological procedure from the SDSS DR7 data release, and which populate the deep interior of voids. Our void galaxies span a range of absolute B-magnitude from  $M_B = -15.5$  to  $M_B = -20$ , while at the  $3.6\mu\text{m}$  band their magnitudes

# Примеры галактик войдов

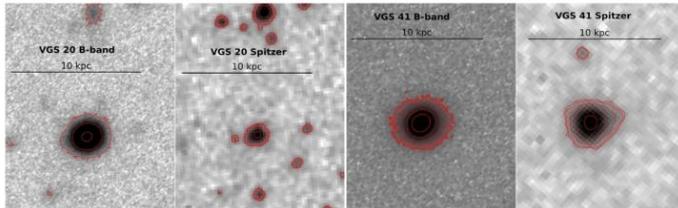
Spirals



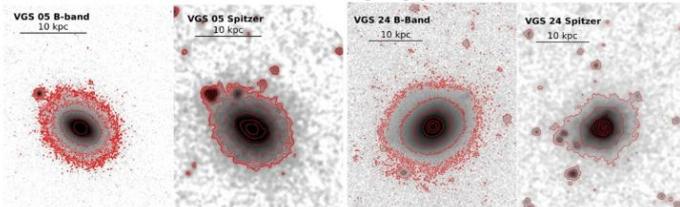
Edge-ons



Compact galaxies



Early-types



- В основном – поздние спирали, немного неправильных, и ранние типы тоже есть. Светимость – до  $M(B)=-20$

# В галактиках войдов – ничего особенного, только компактный размер

