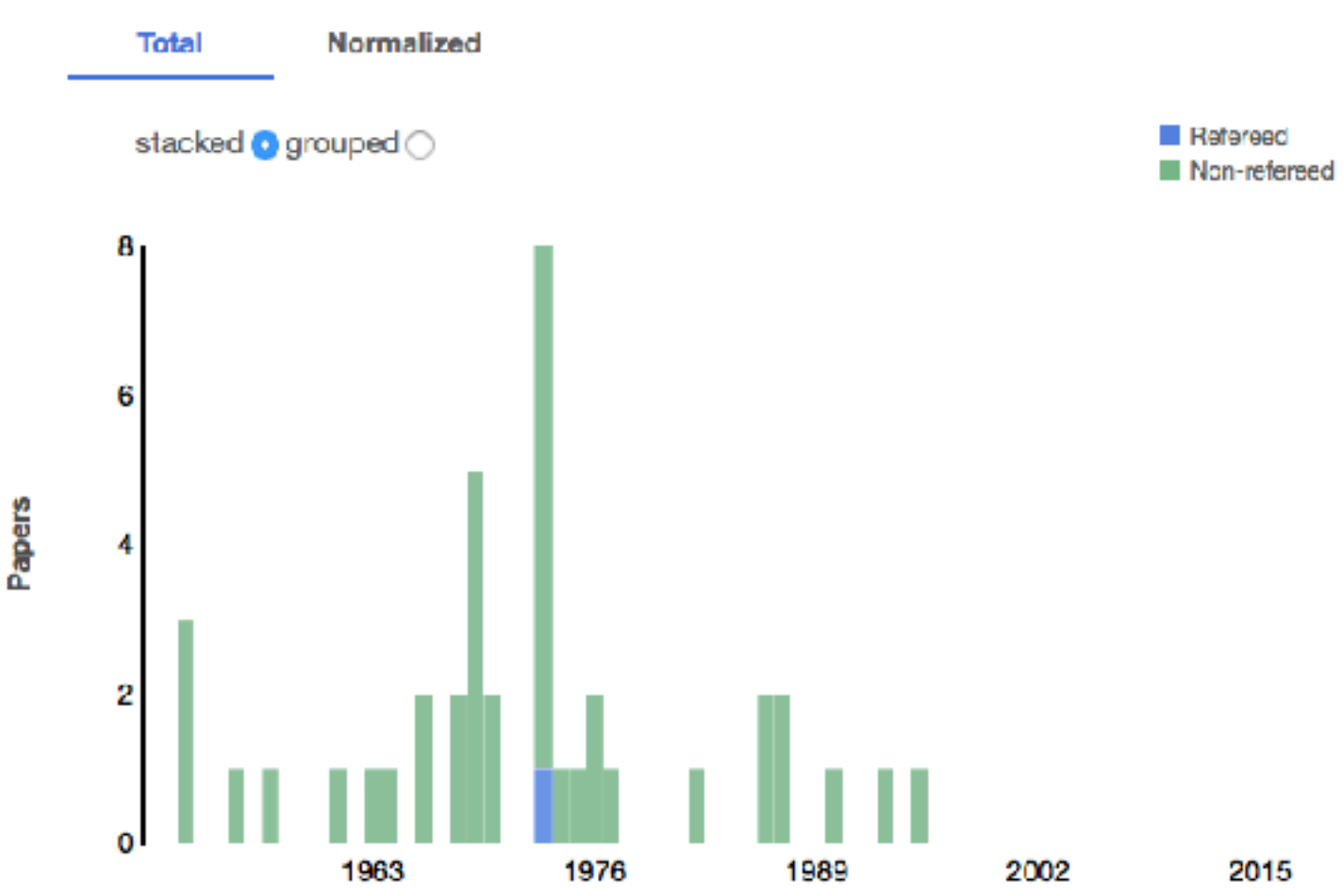
Kuzmin 100: tänapäev

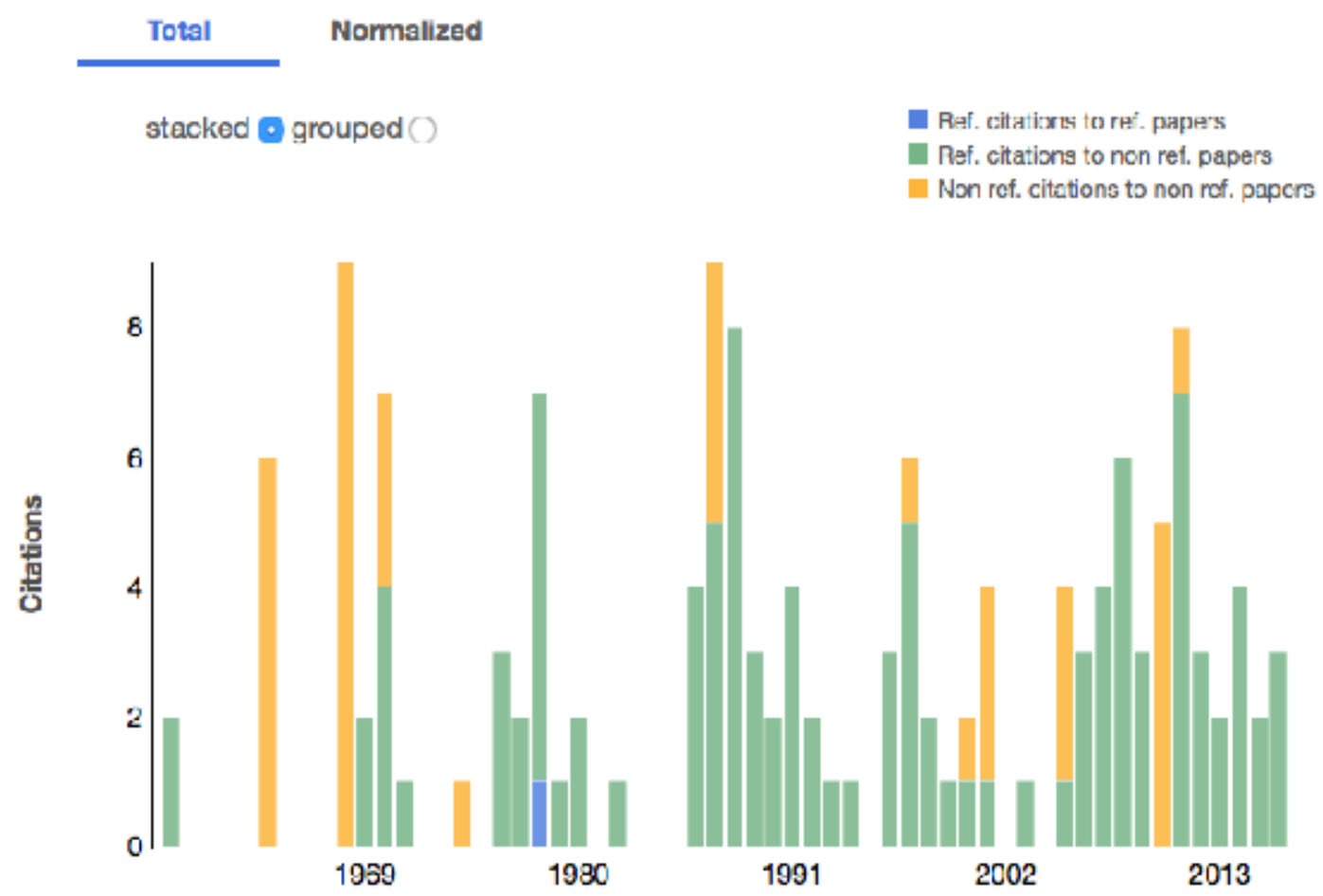
Simple citations

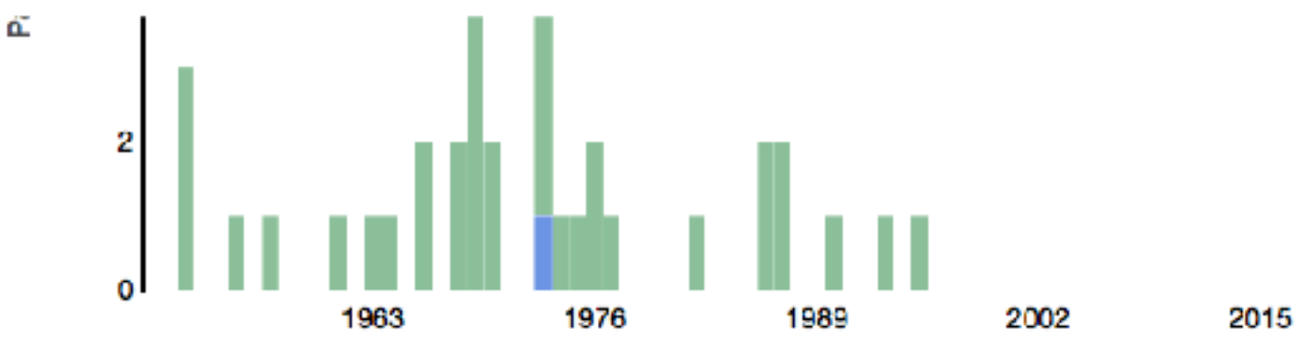


Simple citations

Citations

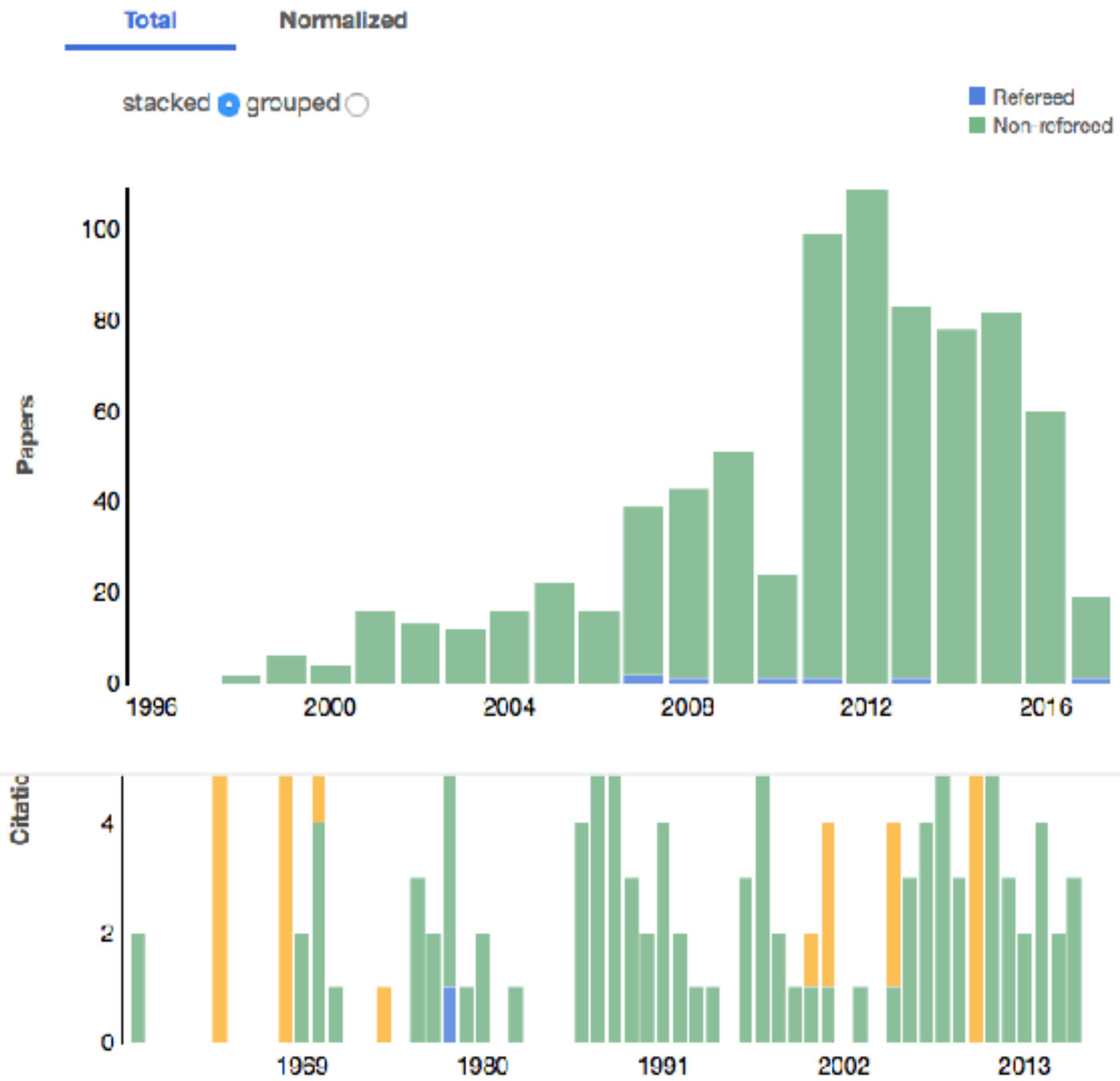
	Totals	Refereed
Number of citing papers	112	1
Total citations	144	1
Number of self-citations	0	0
Average citations	3.6	1
Median citations	2	1
Normalized citations	124.6	0.2
Refereed citations	107	1
Average refereed citations	2.7	1
Median refereed citations	1.5	1
Normalized refereed citations	90.1	0.2

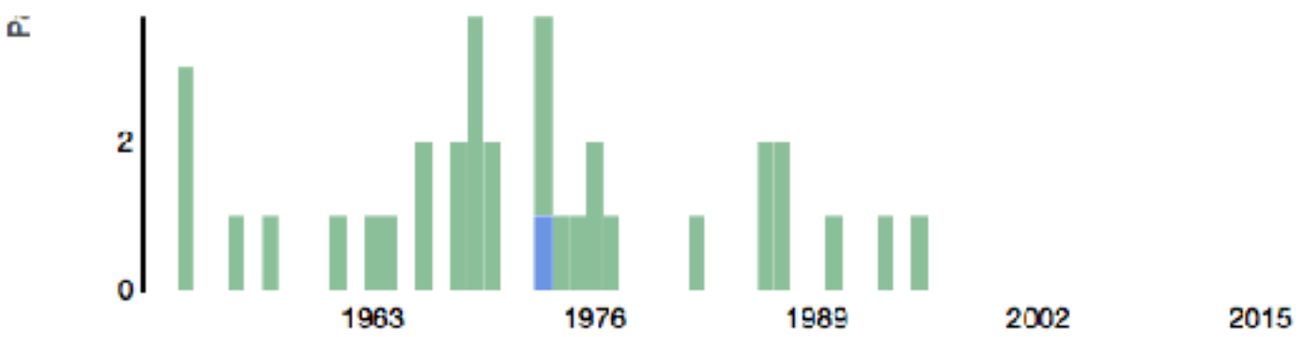




Reads

	Totals	Refereed
Total number of reads	794	7
Average number of reads	20.4	7
Median number of reads	15	7
Total number of downloads	258	0
Average number of downloads	6.6	0
Median number of downloads	0	0
Median refereed citations	1.5	1
Normalized refereed citations	90.1	0.2





Kes viitavad?

#	Bibcode Authors	Cites Title	Date	List of Links Access Control Help
1	2016MNRAS.455.1079P Price-Whelan, Adrian M.; Johnston, Kathryn V.; Valluri, Monica; Pearson, Sarah; Küpper, Andreas H. W.; Hogg, David W.	1.000 Chaotic dispersal of tidal debris	01/2016	A E F X R C S U
2	2011BaltA..20..211D de Zeeuw, P. Tim; van de Ven, Glenn	1.000 Grigori Kuzmin and Stellar Dynamics	00/2011	A F G X R C S U
3	2009MNRAS.396..109W Wu, Xufen; Zhao, Hongsheng; Wang, Yougang; Llinares, Claudio; Knebe, Alexander	1.000 N-body simulations for testing the stability of triaxial galaxies in MOND	06/2009	A E F X R C U
4	2006A&A...455..499C Cincotta, P. M.; Giordano, C. M.; Pérez, M. J.	1.000 Global dynamics in galactic triaxial systems. I	08/2006	A E F X R C U
5	2000AdSAC..10..229V Valluri, Monica; Merritt, David	1.000 Orbital Instability and Relaxation in Stellar Systems	05/2000	A E X R C U
6	1999PASP..111..129M Merritt, David	1.000 Elliptical Galaxy Dynamics	02/1999	A E F X R C S N U
7	1998ApJ...506..686V Valluri, Monica; Merritt, David	1.000 Regular and Chaotic Dynamics of Triaxial Stellar Systems	10/1998	A E F X R C S U
8	1998NYASA.848...48M Merritt, David; Valluri, Monica	1.000 Self-Consistent Gravitational Chaos	00/1998	E T R C
9	1997MNRAS.292..657S Sridhar, S.; Touma, J.	1.000 Three-dimensional, axisymmetric cusps without chaos	12/1997	A E F G X R C S U

Kuzmini ketas

a.k.a. Toomre's model 1

$$\Phi_{\mathrm{K}}(R,z) = -\frac{GM}{\sqrt{R^2 + (a+|z|)^2}} \qquad (a \geq 0).$$

Kuzmini ketas

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Astrophysics > Astrophysics of Galaxies

Analytical potential-density pairs from complex-shifted Kuzmin-Toomre discs

D. Vogt, P. S. Letelier

(Submitted on 6 Aug 2009)

The complex-shift method is applied to the Kuzmin-Toomre family of discs to generate a family of non-axisymmetric flat distributions of matter. These are then superposed to construct non-axisymmetric flat rings. We also consider triaxial potential-density pairs obtained from these non-axisymmetric flat systems by means of suitable transformations. The use of the imaginary part of complex-shifted potential-density pairs is also discussed.

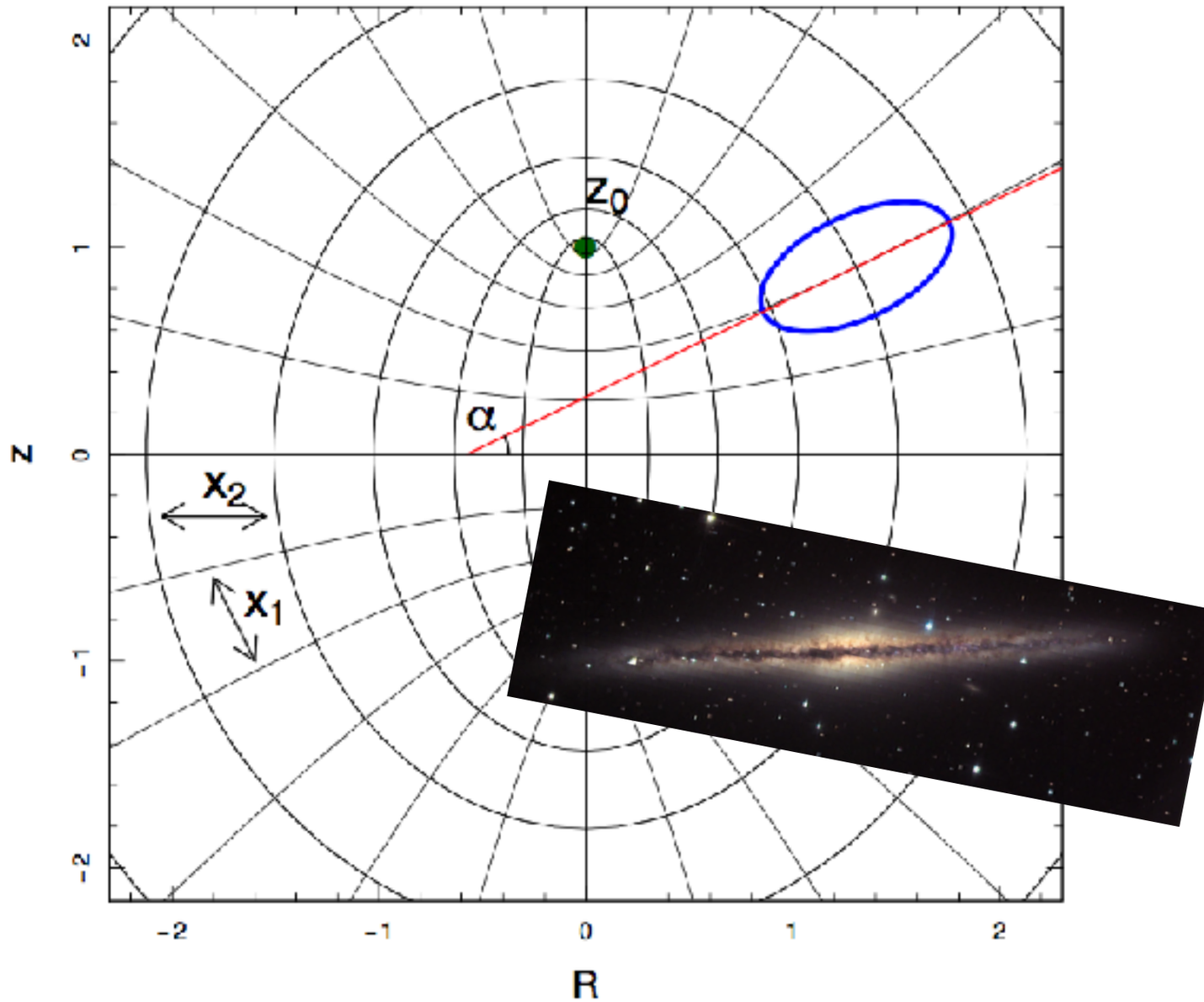
Comments: 20 pages, 7 figures, accepted for publication in MNRAS
Subjects: **Astrophysics of Galaxies (astro-ph.GA)**
Journal reference: MNRAS, 398, 1563 (2009)
DOI: 10.1111/j.1365-2966.2009.15217.x
Cite as: arXiv:0908.0872 [astro-ph.GA]
(or arXiv:0908.0872v1 [astro-ph.GA] for this version)

Kolmas liikumisintegraal

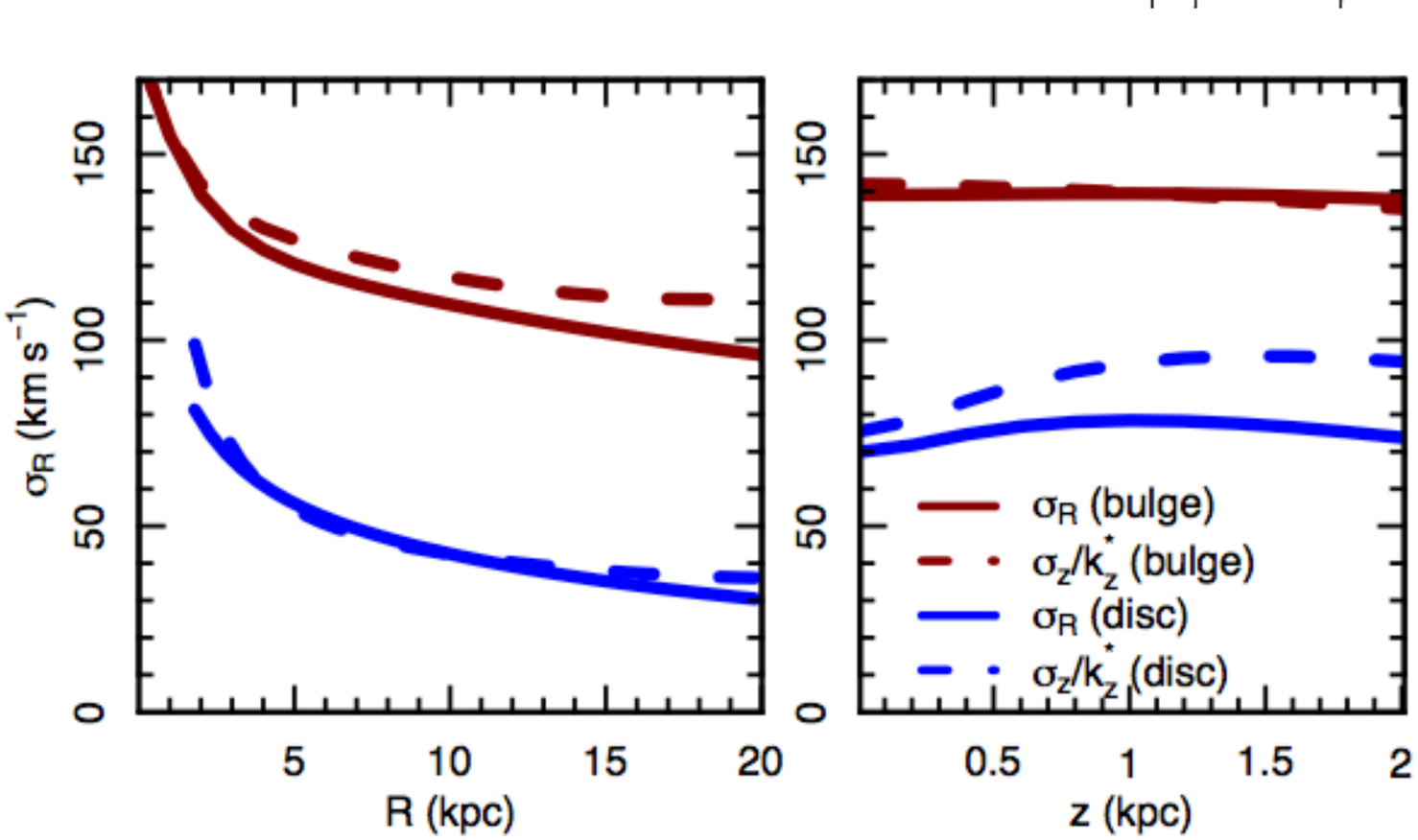
$$J_3 = (Rv_z - zv_R)^2 + z^2 v_\theta^2 + z_0^2(v_z^2 - 2\Phi^*).$$

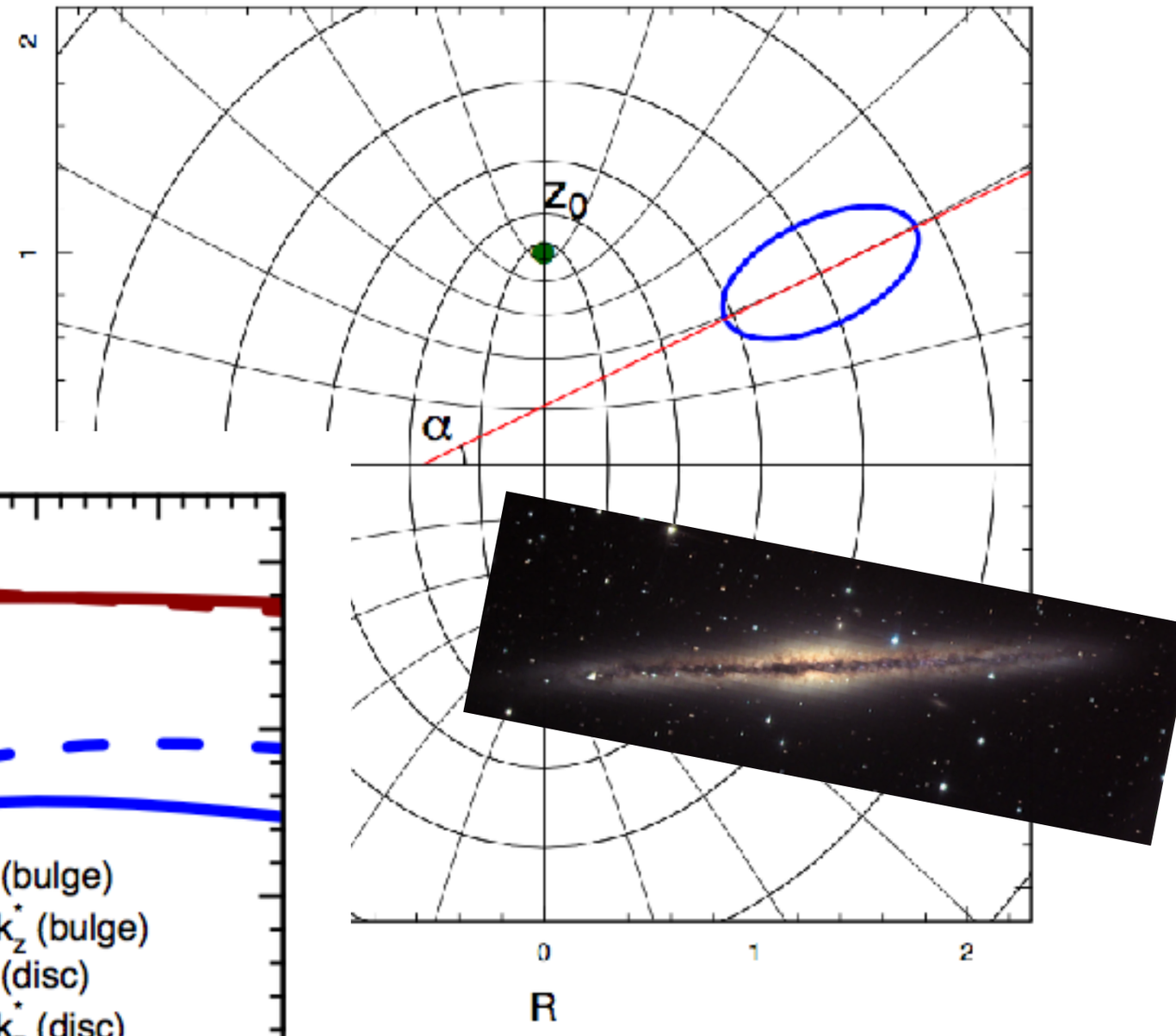
$$\left.\begin{aligned} z_0^2 \frac{\partial \Phi^*}{\partial R} &= z^2 \frac{\partial \Phi}{\partial R} - Rz \frac{\partial \Phi}{\partial z}, \\ z_0^2 \frac{\partial \Phi^*}{\partial z} &= (R^2 + z_0^2) \frac{\partial \Phi}{\partial z} - Rz \frac{\partial \Phi}{\partial R}. \end{aligned}\right\}$$

Rakendus M31



Rakendus M31





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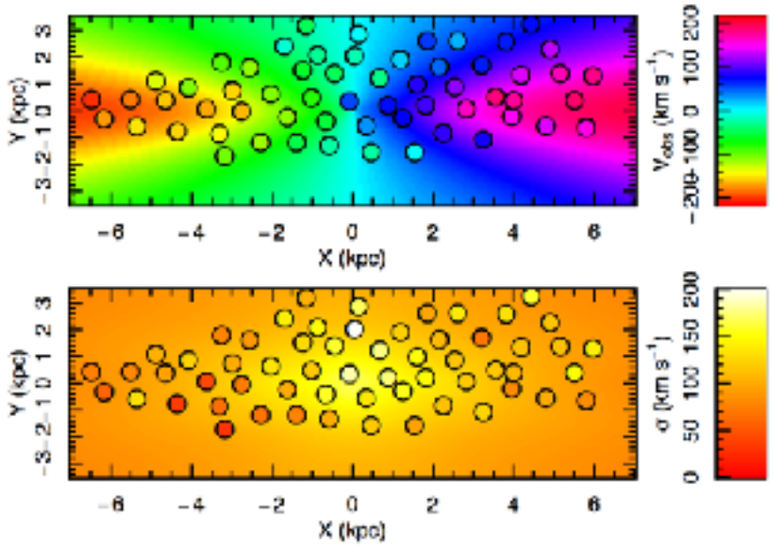

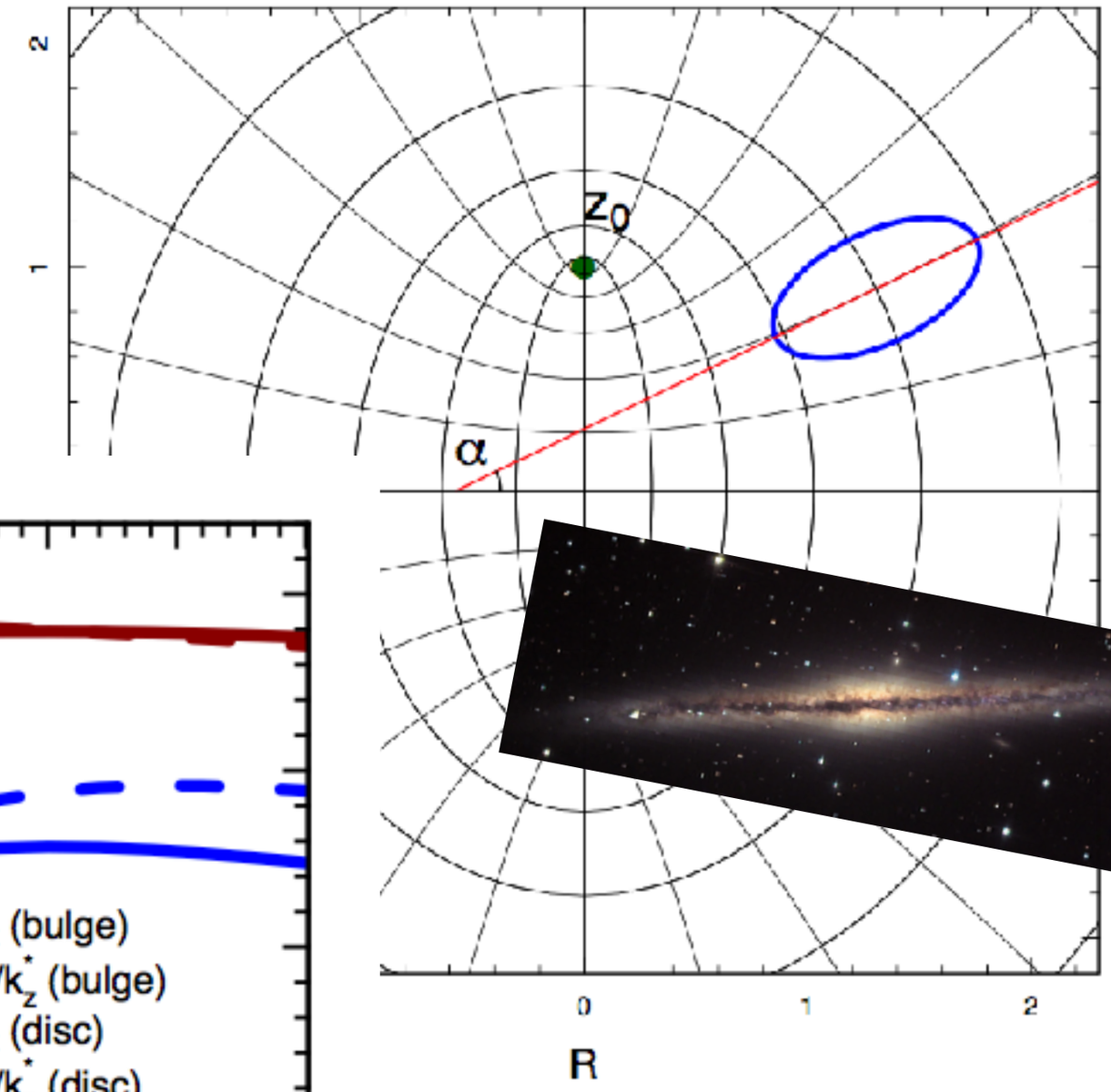

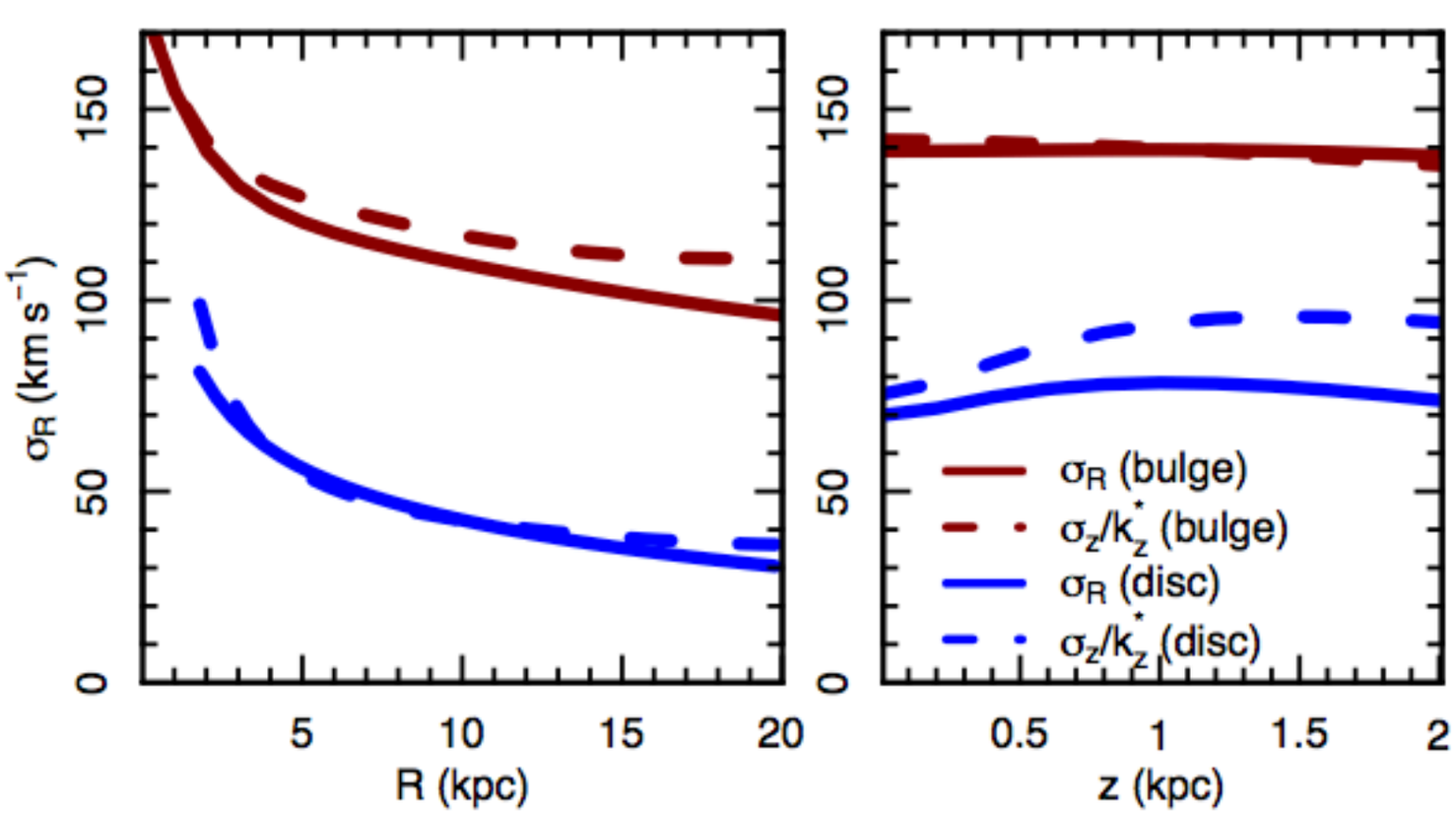

Kuzmin: 1952

Kogutihedus:
0.18 $M_{\odot}pc^{-3}$ vs 0.05±0.01 $M_{\odot}pc^{-3}$

$$-\frac{\partial^2 \Phi}{\partial z^2} = -\sigma_z^2 \frac{\partial^2 \ln D}{\partial z^2}.$$

Kuzmin: 1952

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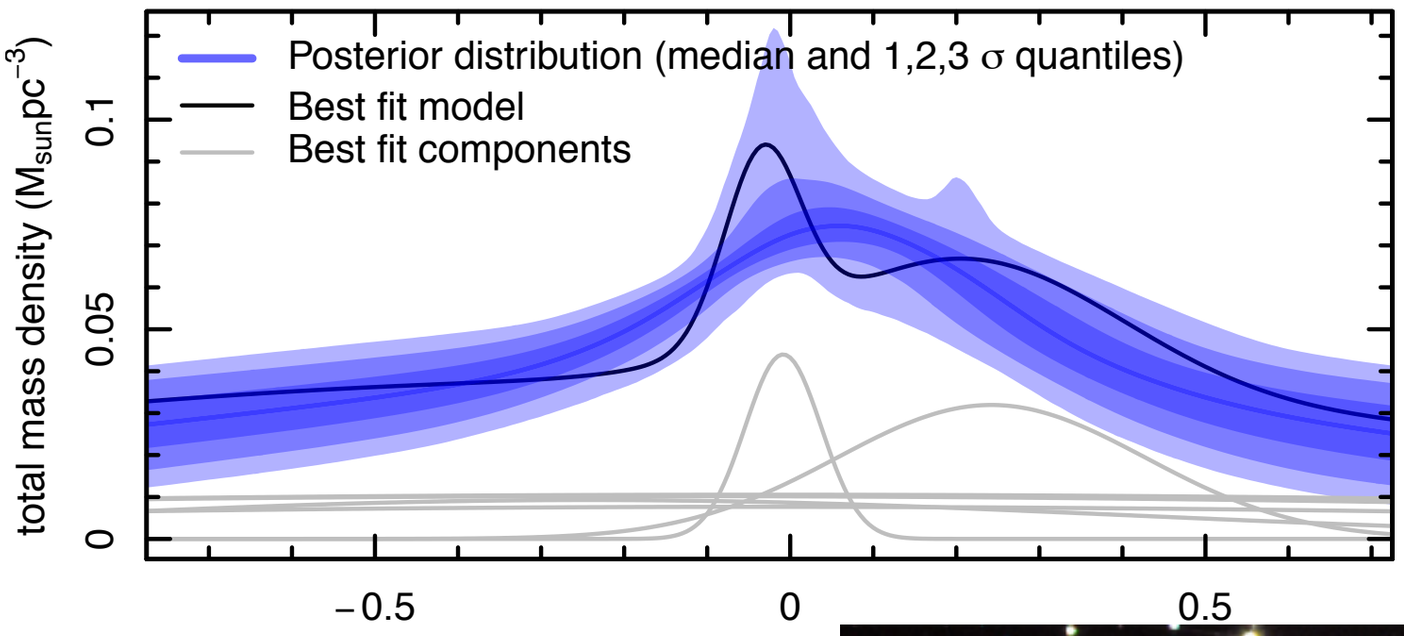

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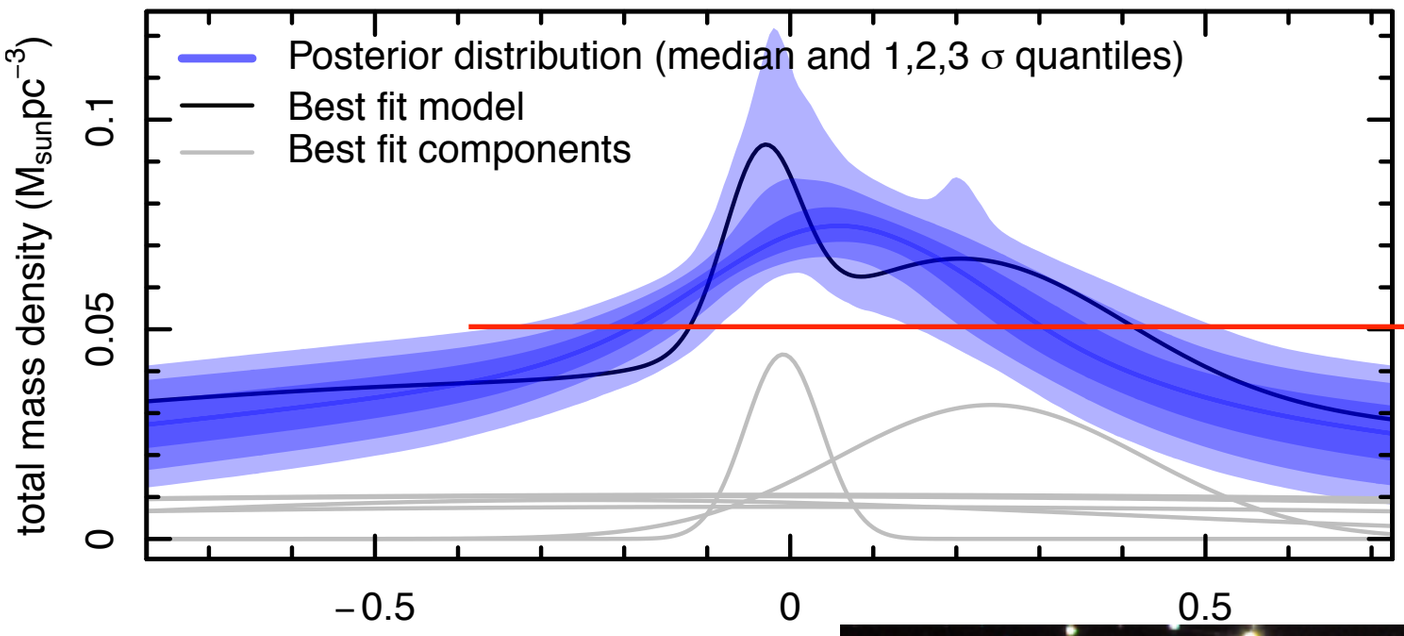

$$-\frac{\partial^2 \Phi}{\partial z^2} = -\sigma_z^2 \frac{\partial^2 \ln D}{\partial z^2}.$$

Tiheduse hinnang: Kuzmin (1952)

Kokkuvõte

Kuzmini ketas on üldkasutatav potentsiaal

Kolmas integraal, on väga oluline, kuid kahjuks vähelevinud Kuzmini tulemus

Kuzmini tööd on ikka veel olulised!