

Dwarf progenitors- what we can learn from circular velocity profiles?

By: Bahar Bidaran

Supervisor: Thorsten Lisker

Zentrum für Astronomie der Universität Heidelberg (ZAH)

Ringberg Conference- December 14th , 2017




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**Which, if only a few, late-type
galaxies are kinematically
similar to dEs?**

***Please check: Rys et al. 2014
For a nice work on the
comparison between late-type
galaxies and dEs' angular
momentum.
Particularly Fig.6***



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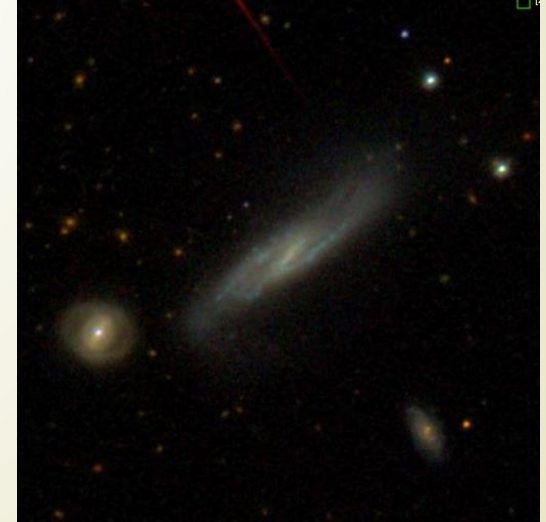
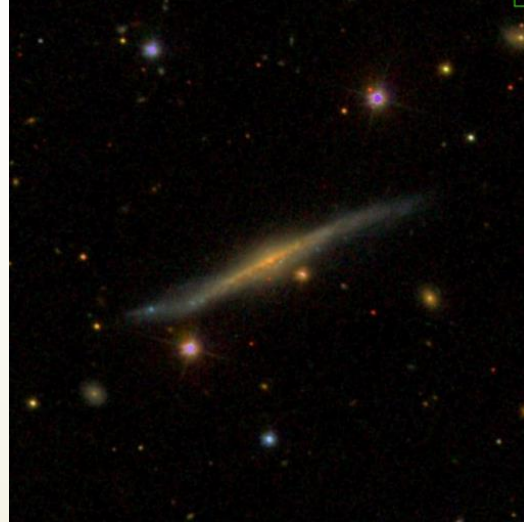
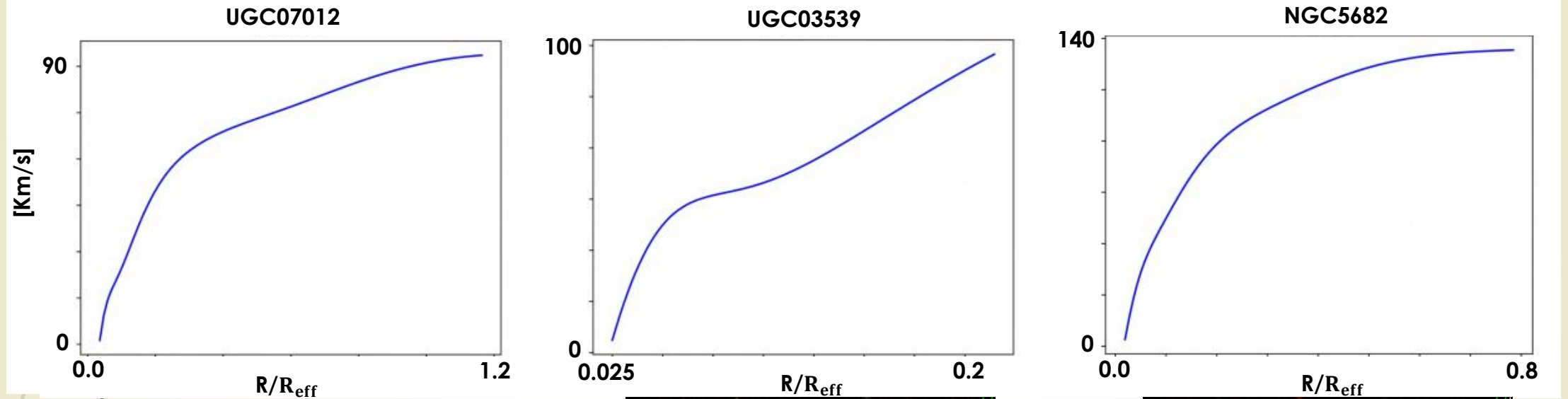
**Circular velocities measured based
on stellar distribution**

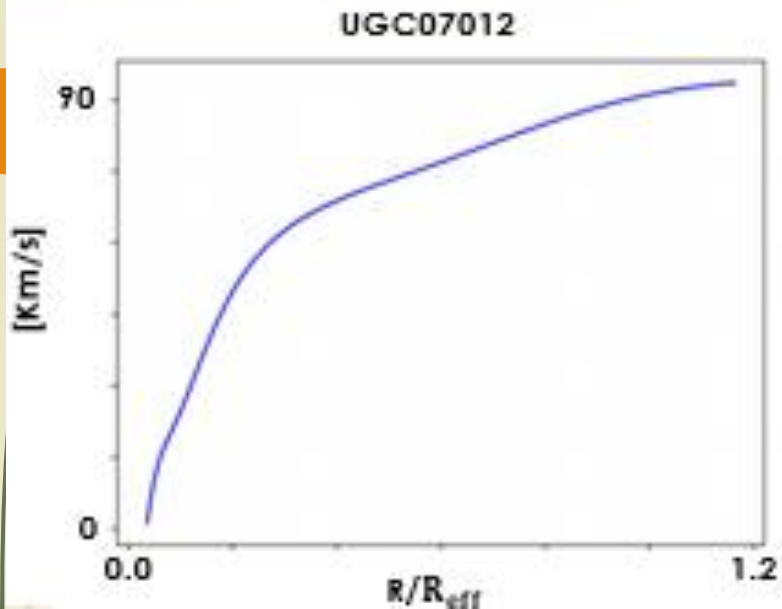
*Ling Zhu & Gigi Leung
(In prep.)*

**16 low-mass late-type CALIFA
galaxies show similar V_{circ}
profiles to dEs, so far!**

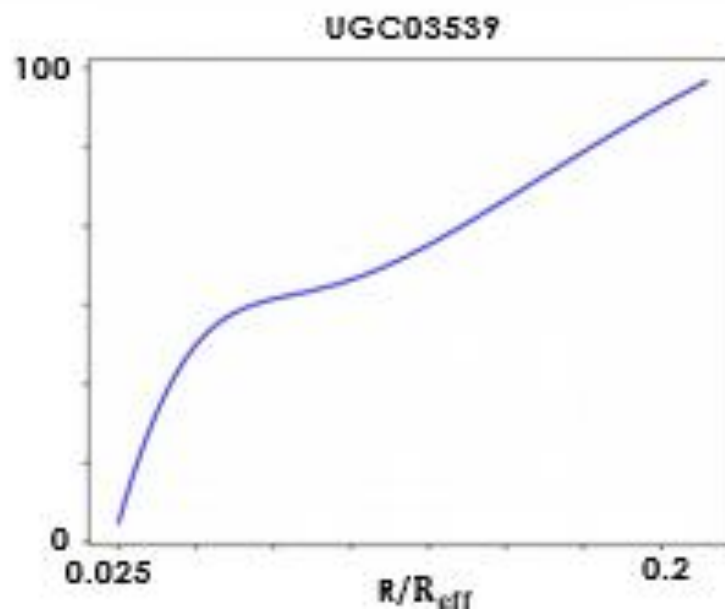
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In search for Kinematic progenitors of dEs:

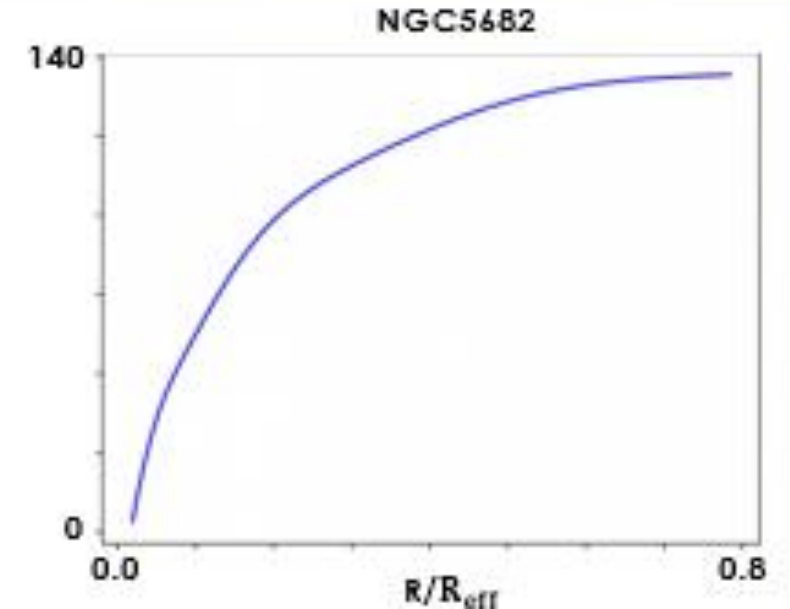




Stellar Mass= $2.8 \times 10^9 M_{\odot}$
 max $v_{\text{circ}} = 92.4 \text{ Km/s}$
 Redshift=0.010
 $R_{\text{eff}} = 14 \text{ arcsec}$
 SFR= $0.69 [M_{\odot}/\text{Year}]$

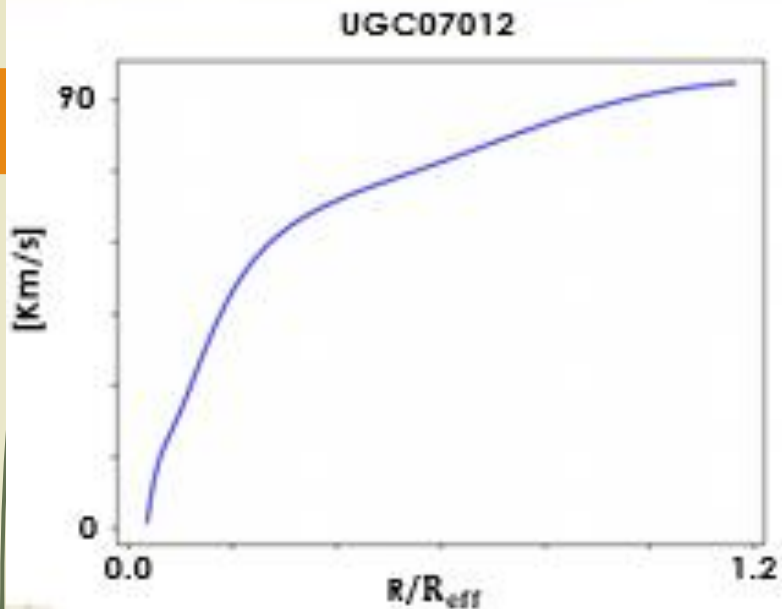


Stellar Mass= $7.0 \times 10^9 M_{\odot}$
 max $v_{\text{circ}} = 98.3 \text{ Km/s}$
 Redshift=0.011
 $R_{\text{eff}} = 20 \text{ arcsec}$
 SFR= $0.20 [M_{\odot}/\text{year}]$

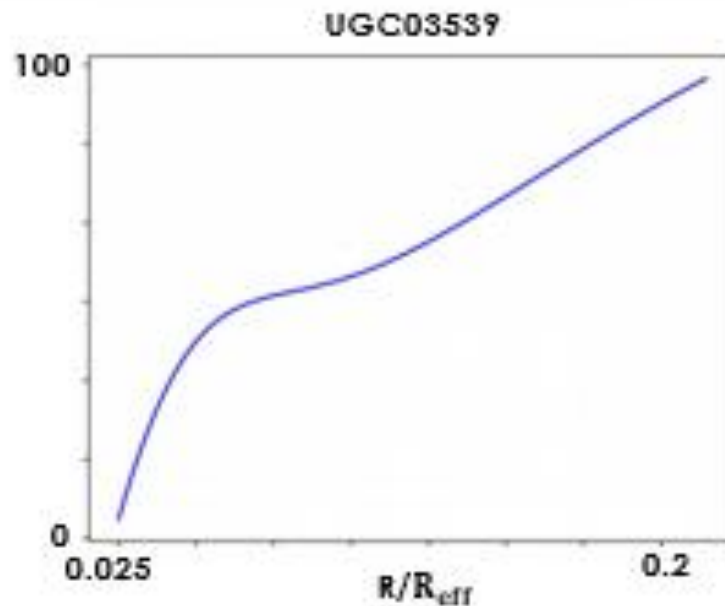


Stellar Mass= $2.5 \times 10^9 M_{\odot}$
 max $v_{\text{circ}} = 135.5 \text{ Km/s}$
 Redshift=0.008
 $R_{\text{eff}} = 26 \text{ arcsec}$
 SFR= $0.26 [M_{\odot}/\text{year}]$

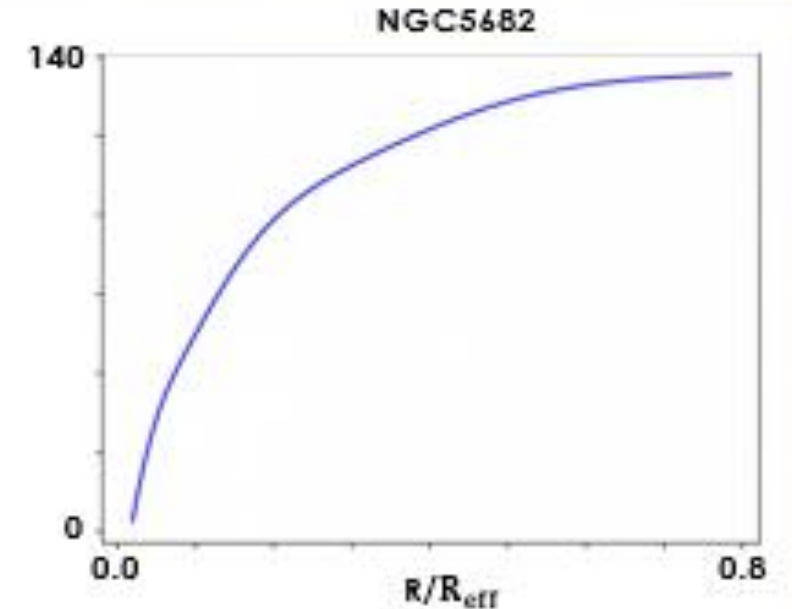
More SAURON Virgo data to be analyzed, MUSE Virgo upcoming!



Stellar Mass=2.8e+9 M_{\odot}
max v_{circ} = 92.401 Km/s



Stellar Mass=7.0e+9 M_{\odot}
max v_{circ} =98.304 Km/s



Stellar Mass=2.5e+9 M_{\odot}
max v_{circ} =135.505 Km/s

Have you seen something similar before?

What are possible mechanisms/ scenarios corresponding to these galaxies?