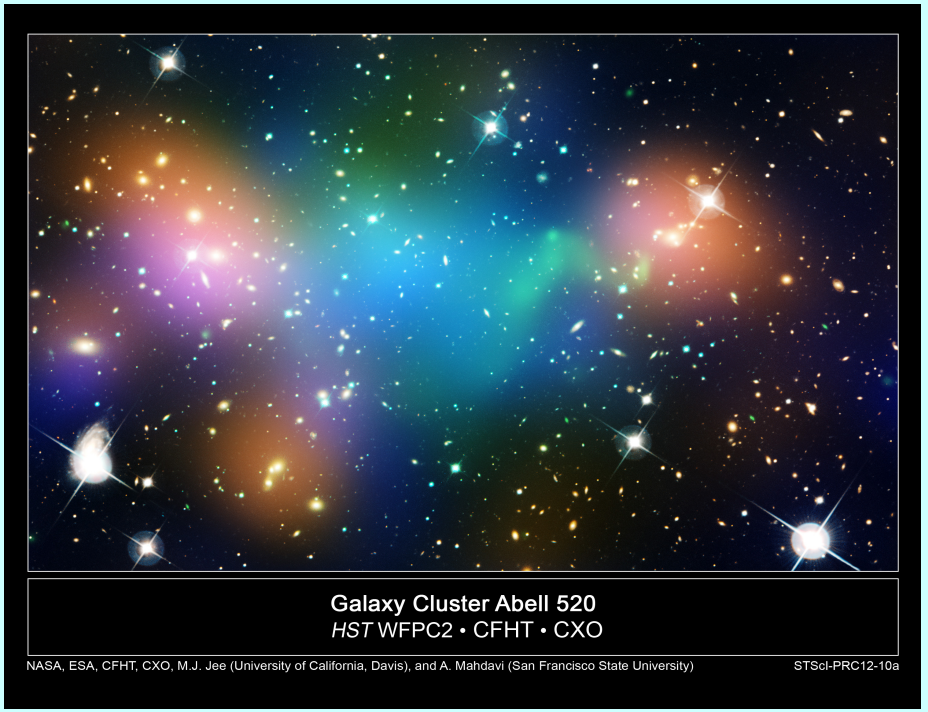
Did this affect the passengers?

Boris Deshev
Tartu Observatory, Estonia

or



Effects of dynamic environment on galaxy evolution

21.Sept.2017, Birmingham

Alexis Finoguenov - Helsinki University, Finland
Miguel Verdugo - Vienna Observatory, Austria
Bodo Ziegler - Vienna Observatory, Austria
Chris Haines - Osservatorio Astronomico di Brera, Italy
Ho Seong Hwang - KIAS, Korea
Changbom Park - KIAS, Korea
Peter Kamphuis - NCRA-TIFR, India
Antti Tamm - Tartu Observatory, Estonia
Maret Einasto - Tartu Observatory, Estonia

www.to.ee

based on:
Deshev et al. 2017
arXiv:1707.03208

TARTU OBSERVATORY
space research centre

Merging clusters do:

Trigger star formation
Miller & Owen 2003
Ferrari et al. 2005
Owen et al. 2005
Hwang & Lee 2009
Stroe et al. 2015,2016

Quench star formation
Poggianti et al. 2004
Deshev et al. 2017

Do nothing
Chung et al. 2010
Kleiner et al. 2014

TARTU OBSERVATORY
space research centre

A520

$z = 0.201$

$\sigma_v = 1036$ km s^{-1}

$M_{200} = 11.6 \times 10^{14}$ $M_\odot$

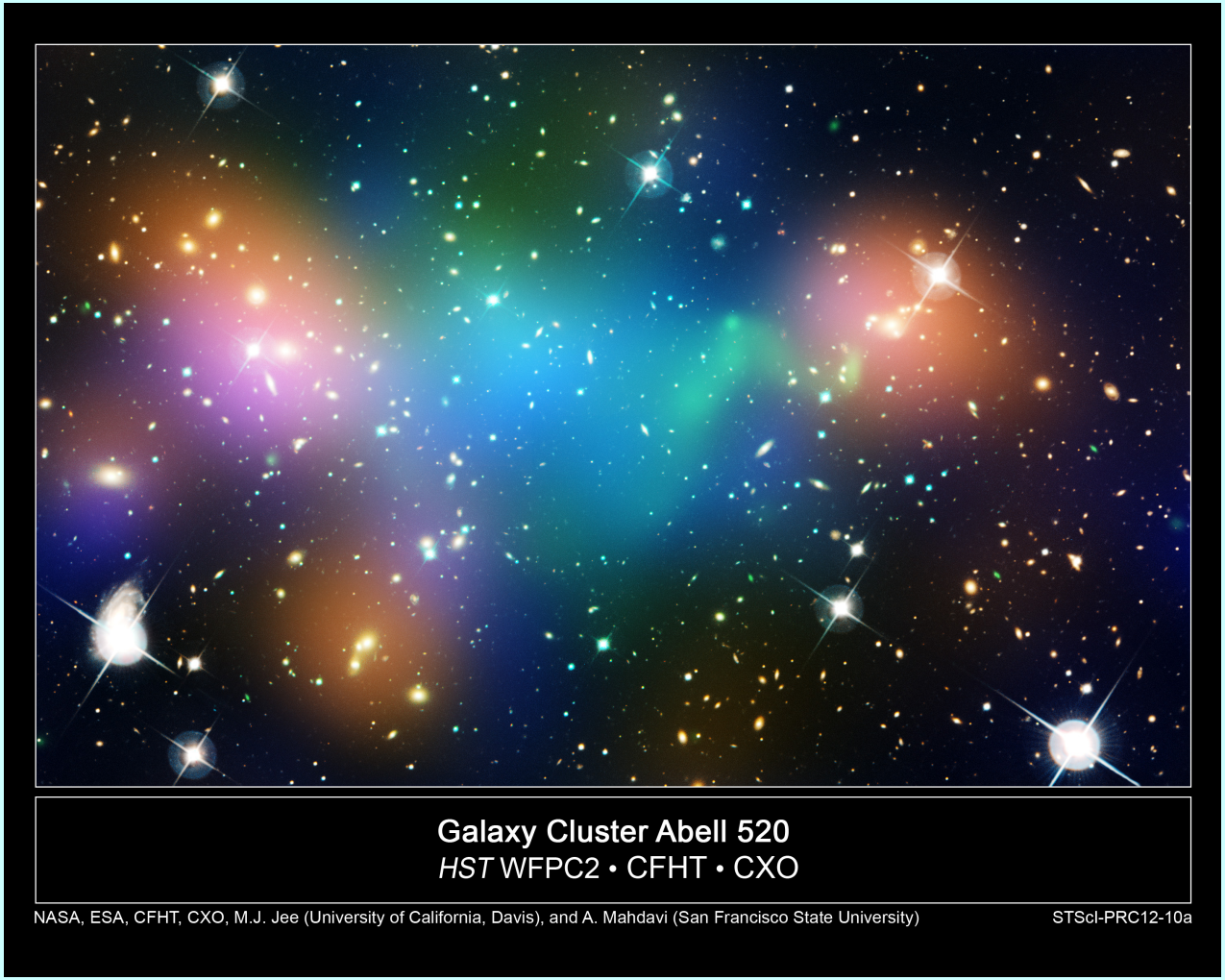
Abell richness class = 1
(Abell+1989)

BHOM (Ebeling+2011)

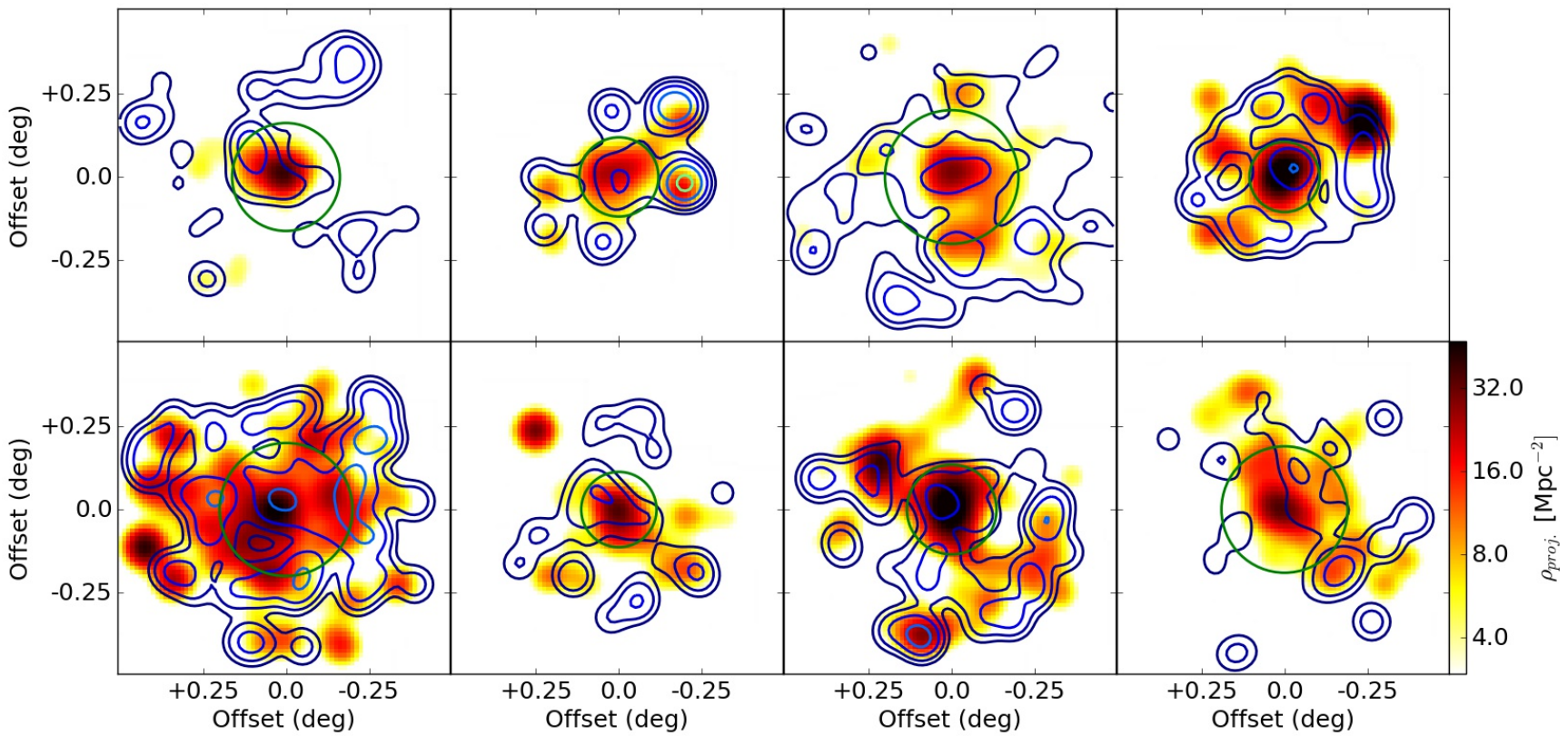
$L_{X(0.1–2.4\ keV)} = 14.2 \times 10^{44}$ erg s^{-1}
(Ebeling+1996)

V = ~2300km s^{-1}
(Markevitch+2005)

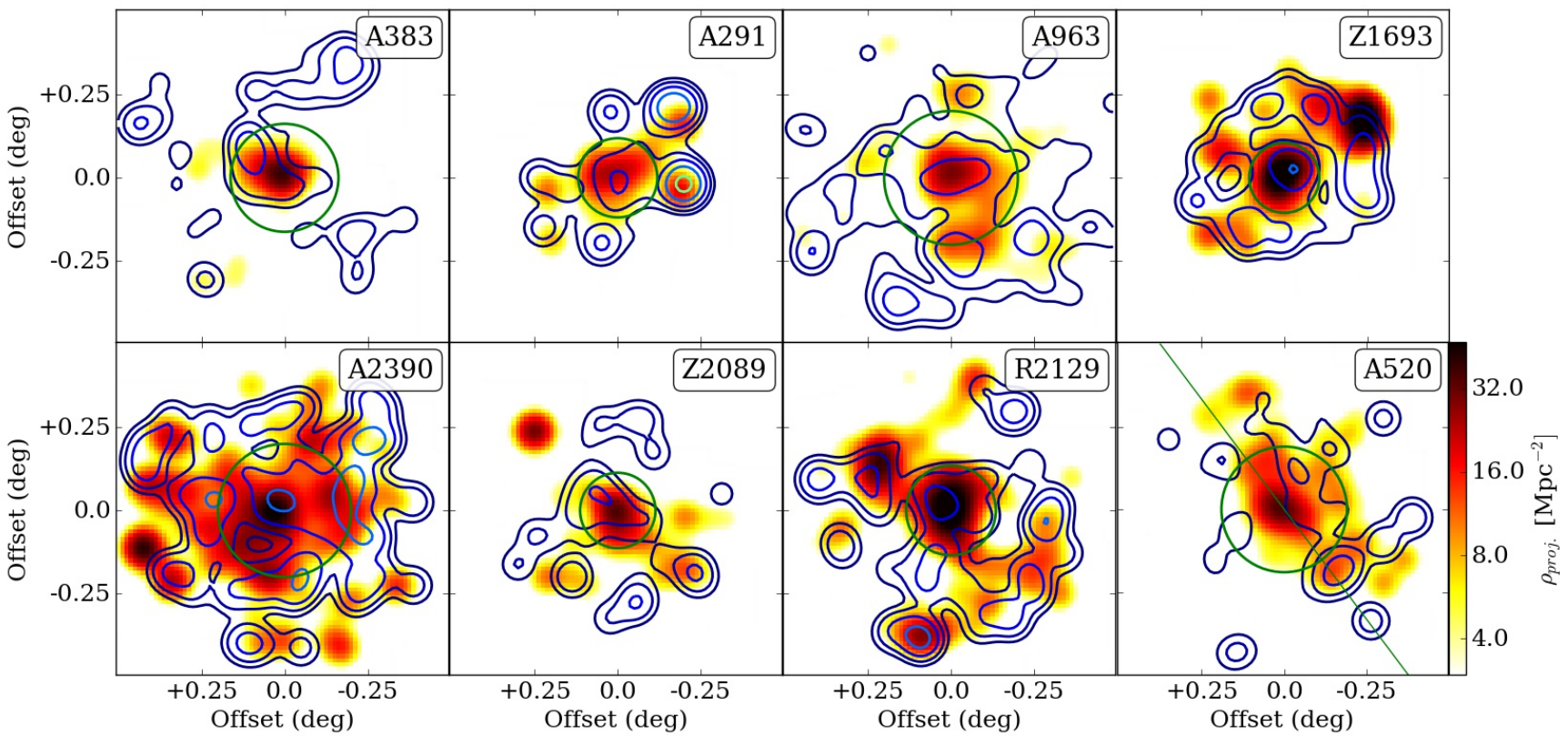
t = 0.2 - 0.4 Gyr
(Deshev+2017)



TARTU OBSERVATORY
space research centre

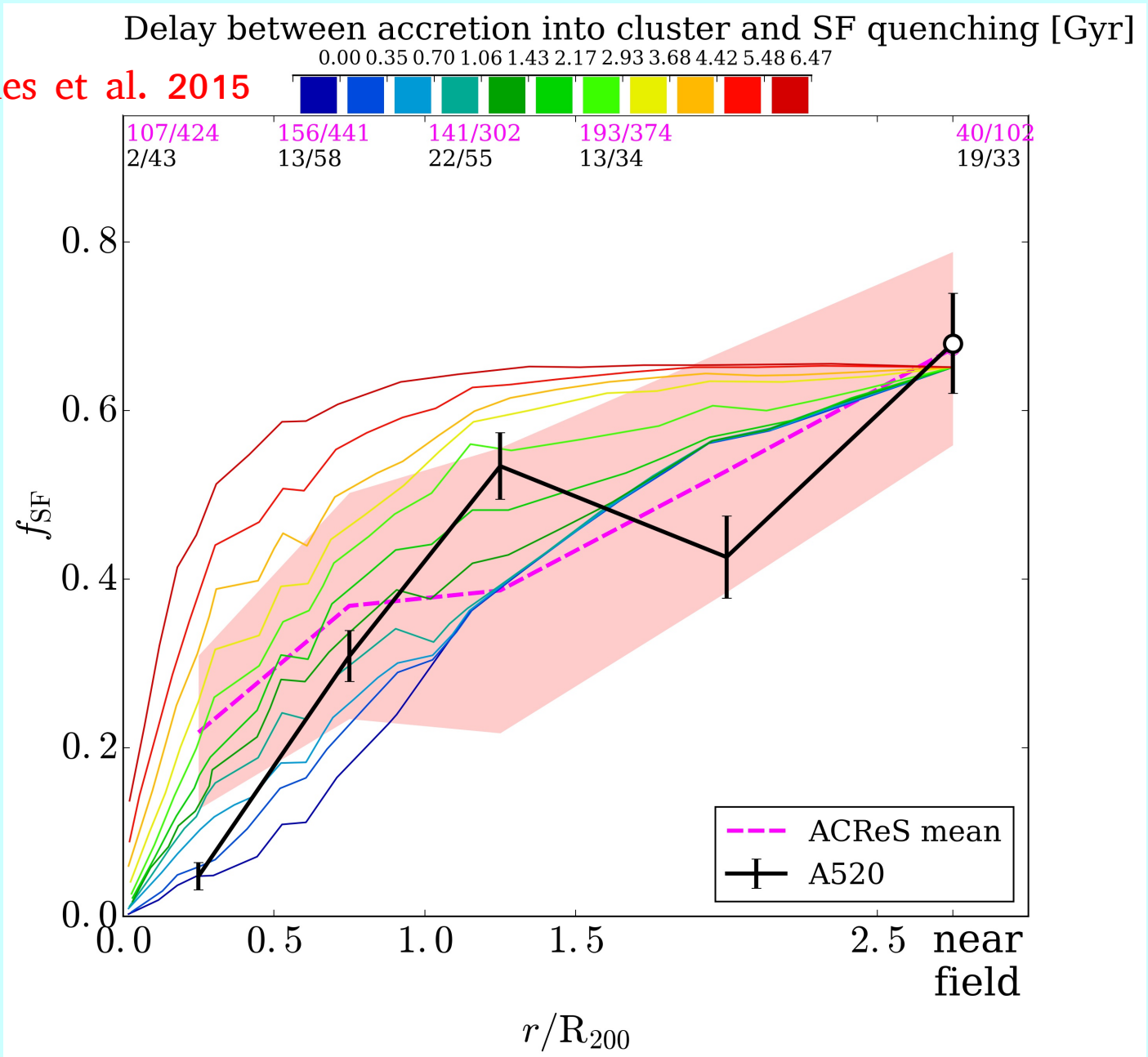


TARTU OBSERVATORY
space research centre



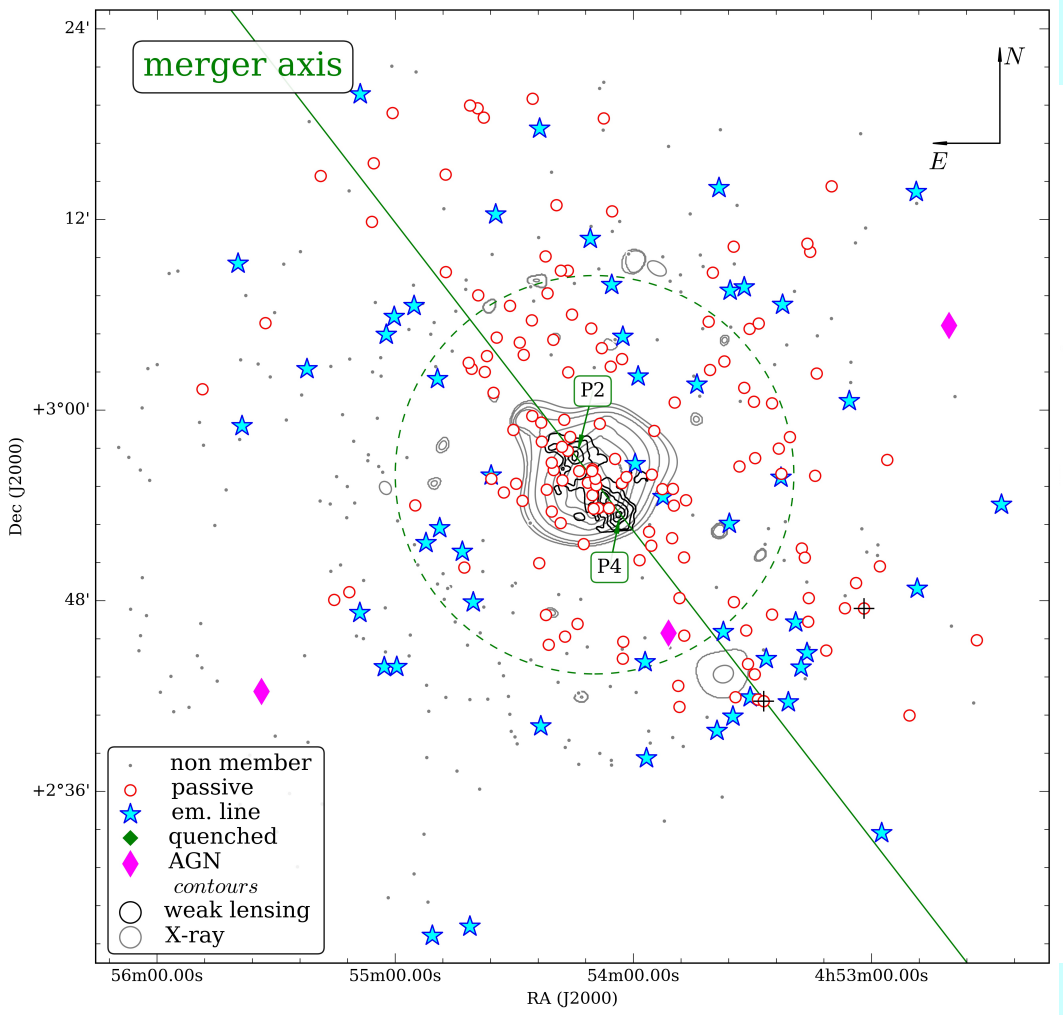
TARTU OBSERVATORY
space research centre

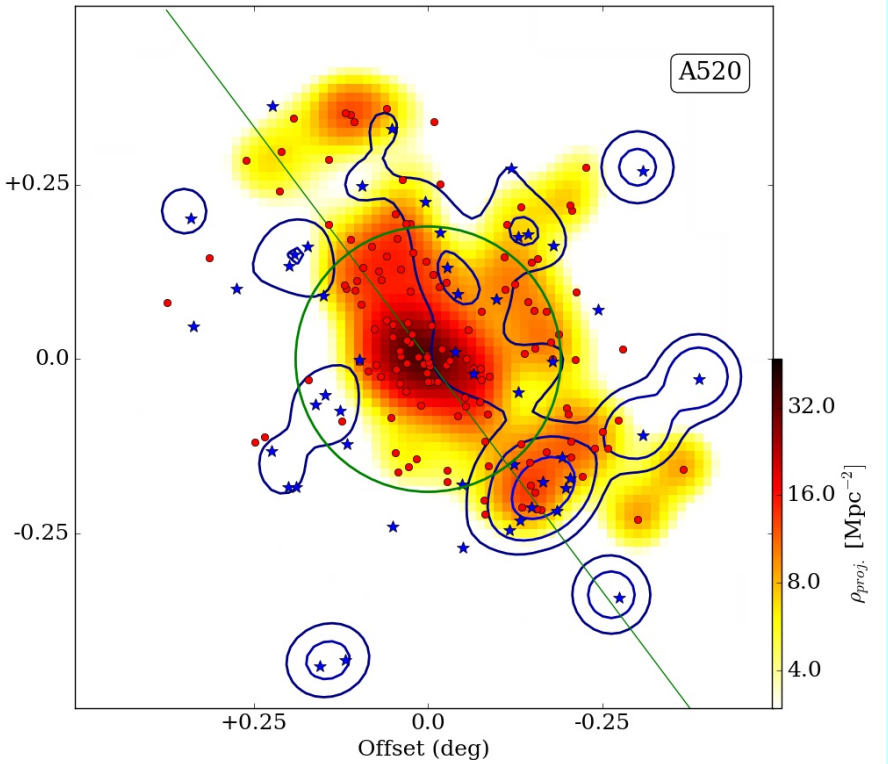
Haines et al. 2015



TARTU OBSERVATORY
space research centre

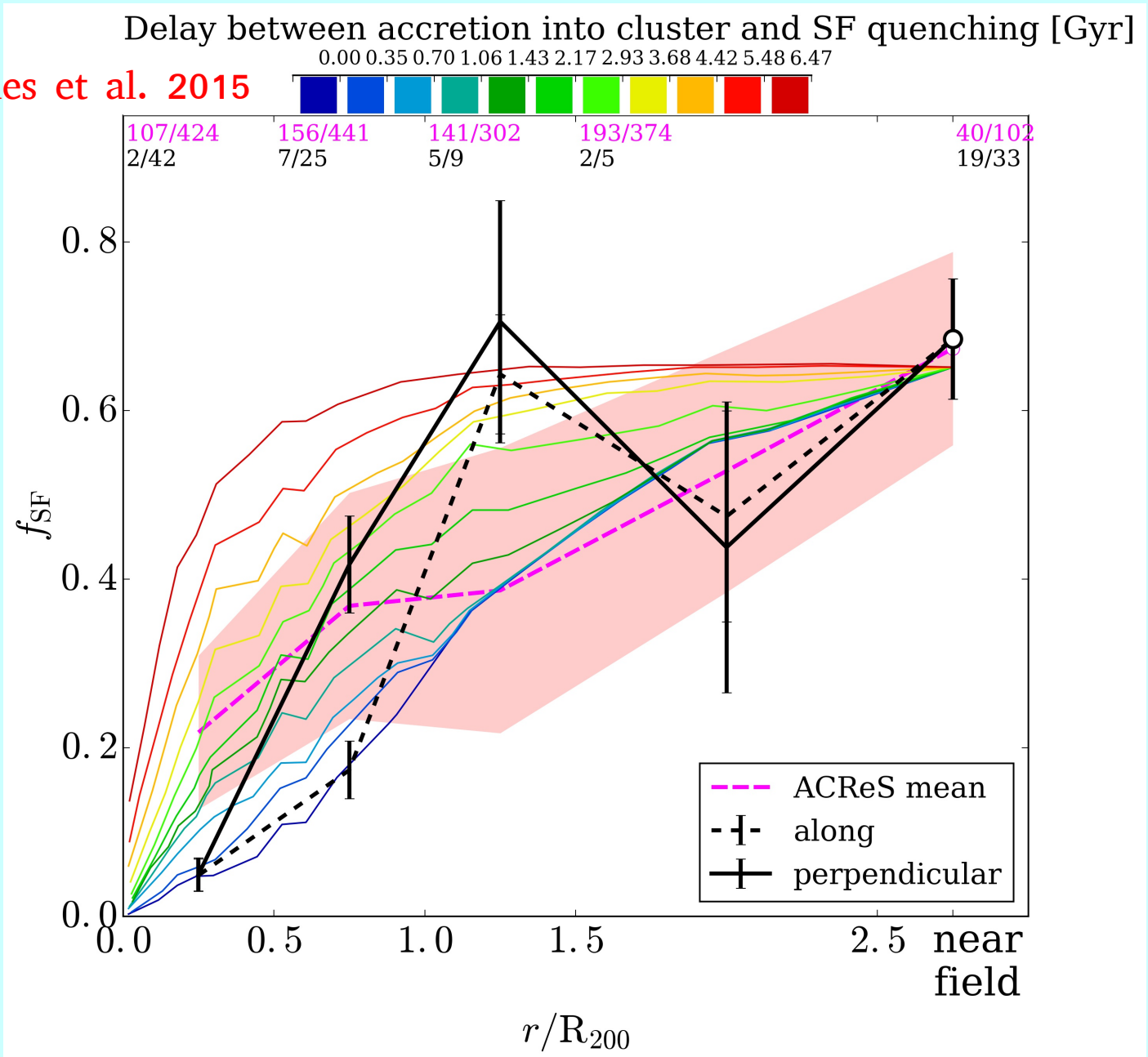
Weak lensing analysis by Jee et al. 2014



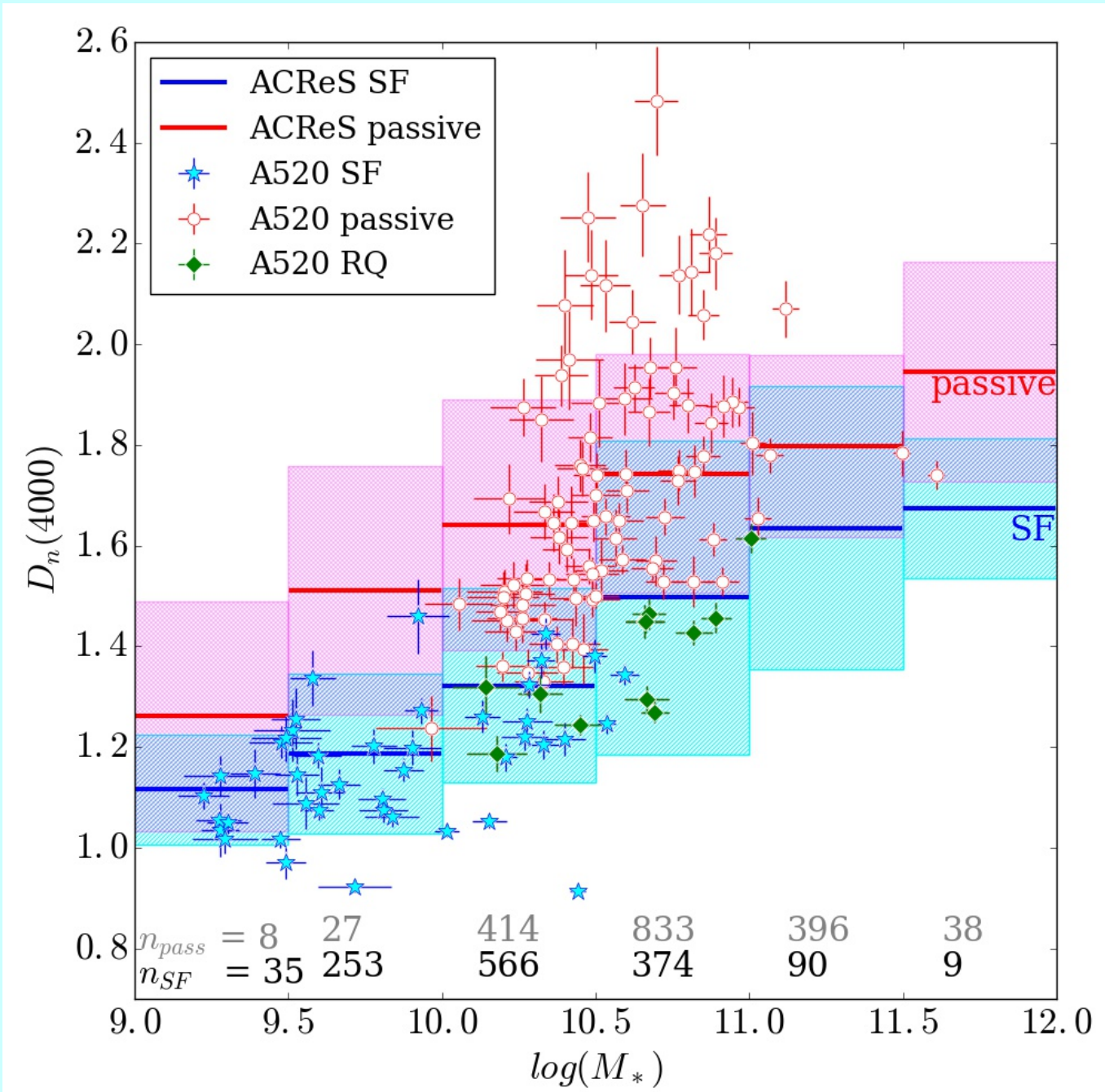


TARTU OBSERVATORY
space research centre

Haines et al. 2015



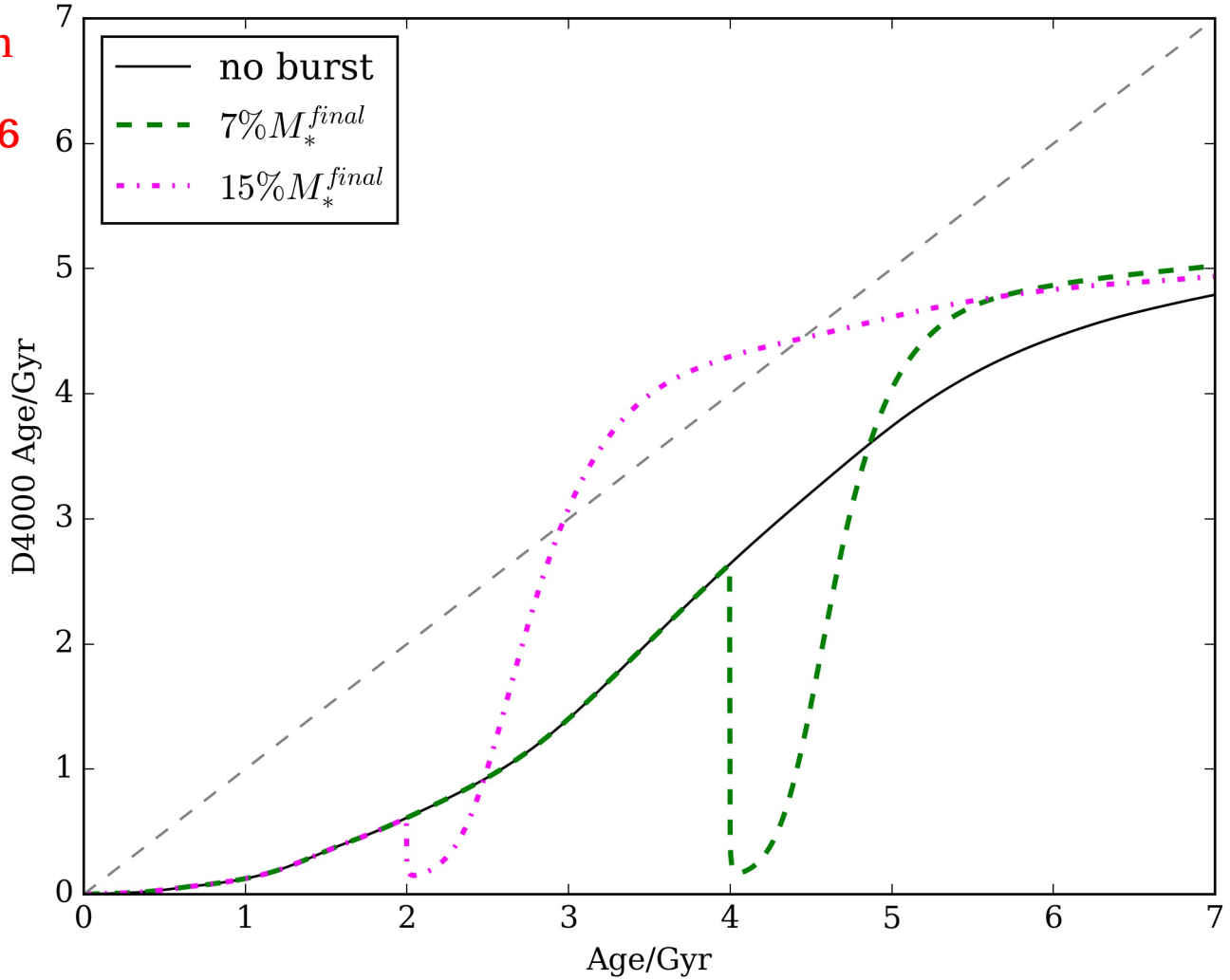
TARTU OBSERVATORY
space research centre



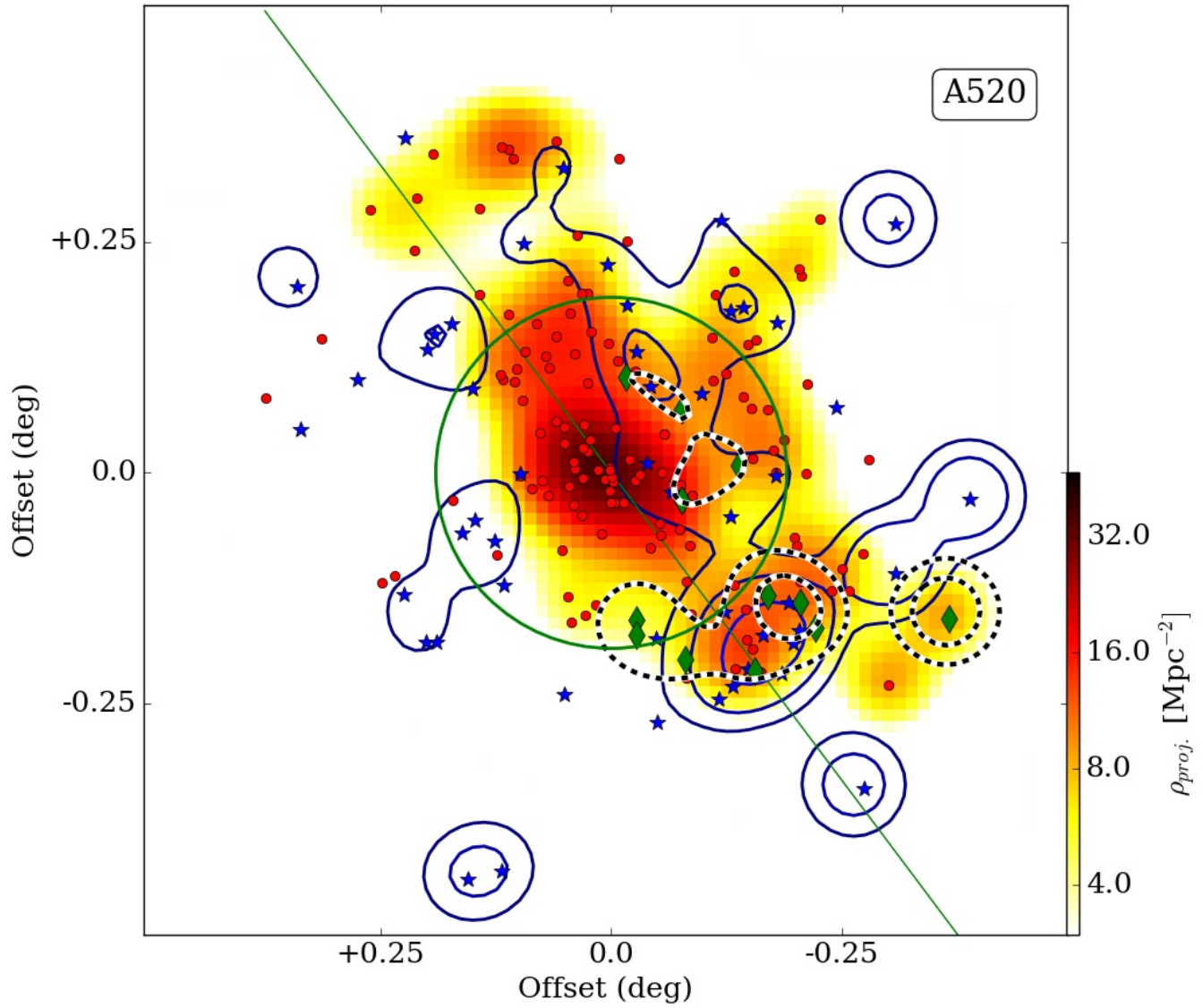
TARTU OBSERVATORY
space research centre

Bruzual & Charlot 2003

D4000–age calibration from López Fernández+2016



TARTU OBSERVATORY
space research centre



TARTU OBSERVATORY
space research centre

THE END

TARTU OBSERVATORY
space research centre