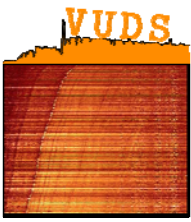




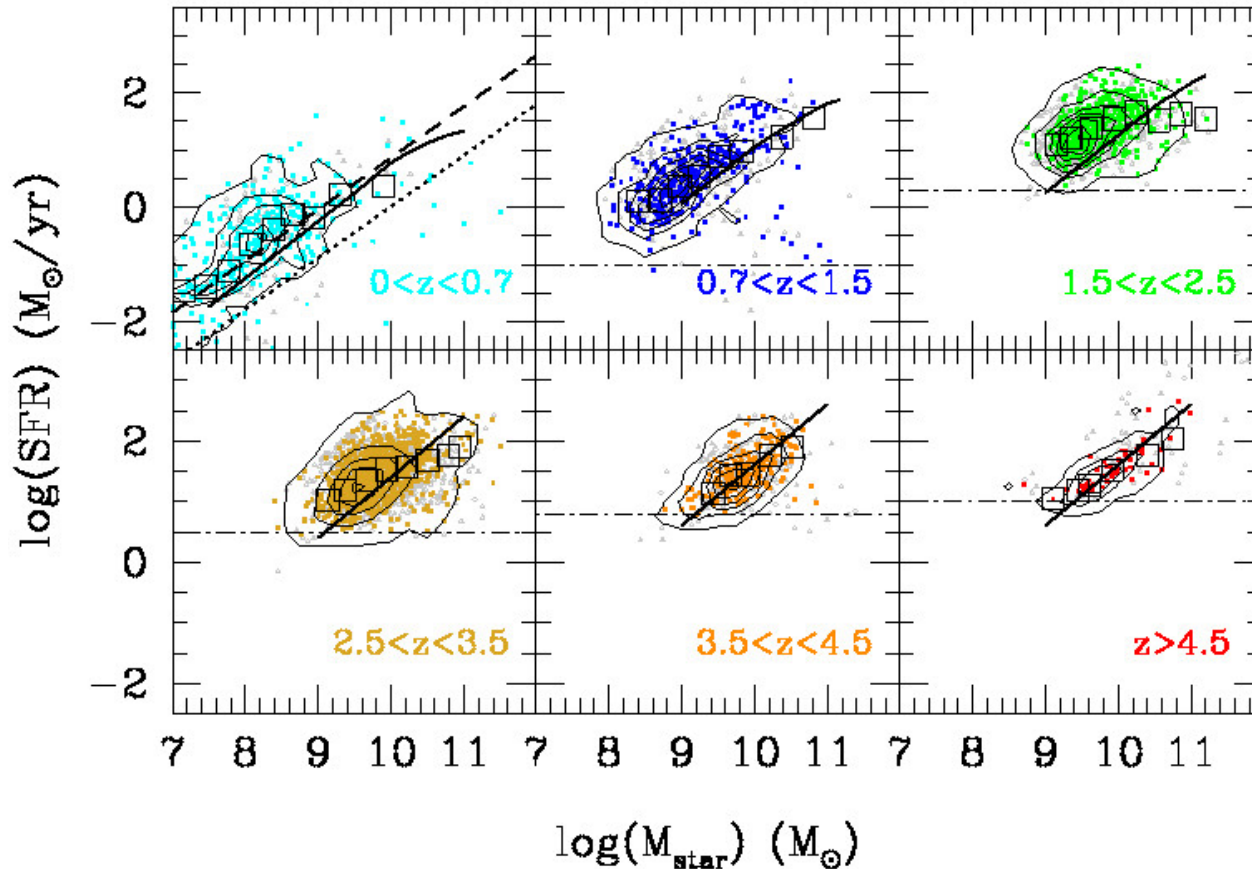
Evolution of the brightest and most massive galaxies since $z \sim 6$

Lidia Tasca
& VUDS collaboration

O. Le Fèvre¹, L.A.M. Tasca¹, P. Cassata¹, B. Garilli³, V. Le Brun¹, D. Maccagni³, L. Pentericci⁴, R. Thomas¹, E. Vanzella², G. Zamorani², E. Zucca², R. Amorin⁴, S. Bardelli², P. Capak¹², L. Cassarà³, M. Castellano⁴, A. Cimatti⁵, J.G. Cuby¹, O. Cucciati^{5,2}, S. de la Torre¹, A. Durkalec¹, A. Fontana⁴, M. Giavalisco¹³, A. Grazian⁴, N. P. Hathi¹, O. Ilbert¹, B. C. Lemaux¹, C. Moreau¹, S. Paltani⁹, B. Ribeiro¹, M. Salvato¹⁴, D. Schaerer^{10,8}, M. Scodreggio³, V. Sommariva^{5,4}, M. Talia⁵, Y. Taniguchi¹⁵, L. Tresse¹, D. Vergani^{6,2}, P.W. Wang¹, S. Charlot⁷, T. Contini⁸, S. Fotopoulou⁹, C. López-Sanjuan¹¹, Y. Mellier⁷, and N. Scoville¹²



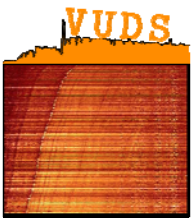
SFR- M_* relation up to $z\sim 5$



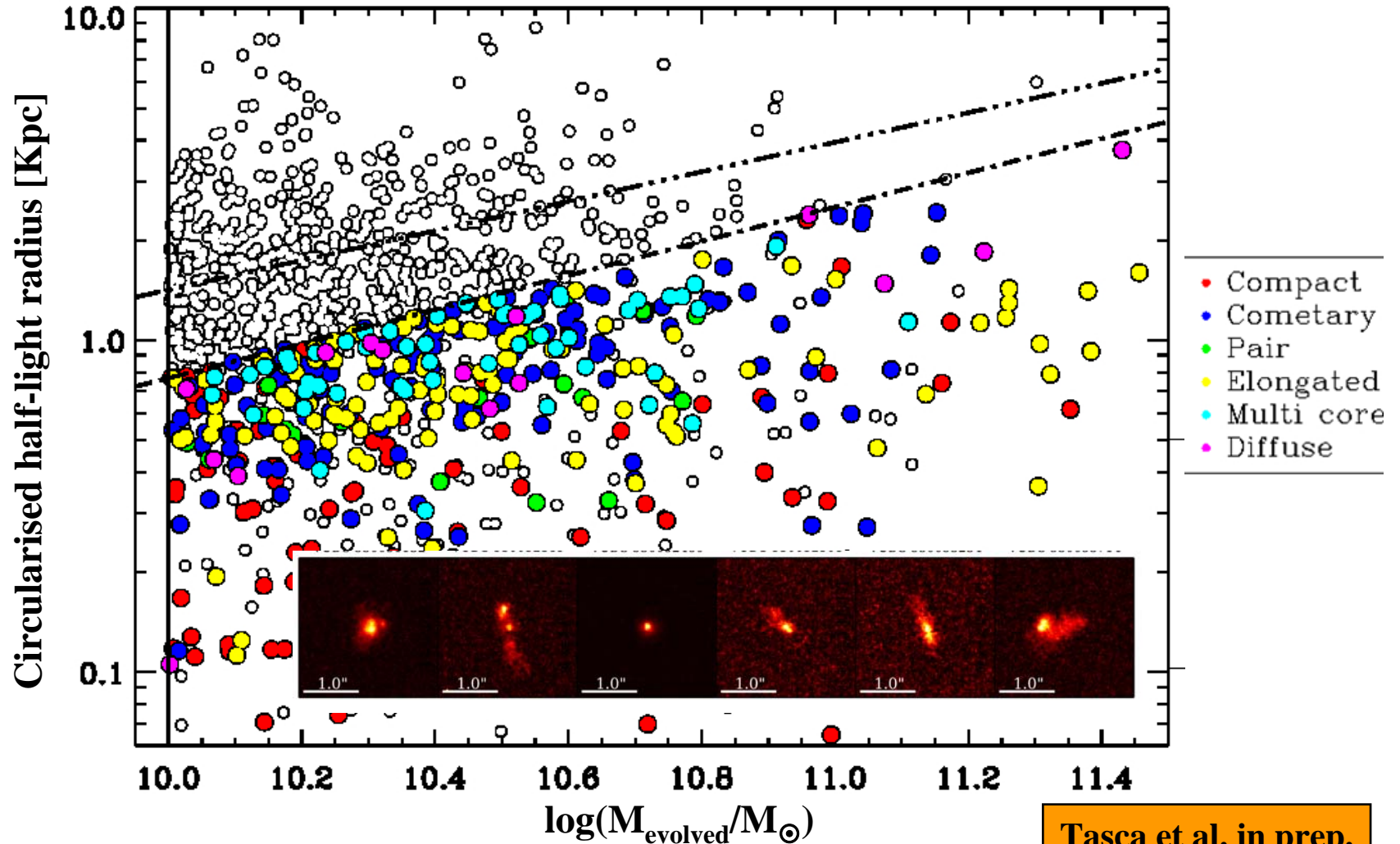
High- M turn-off at $z < 3.5$. \rightarrow effect of SF quenching in a downsizing pattern

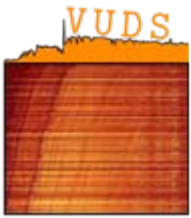
Quenching processes not fully active at $z > 3.5$

Tasca et al. 2015



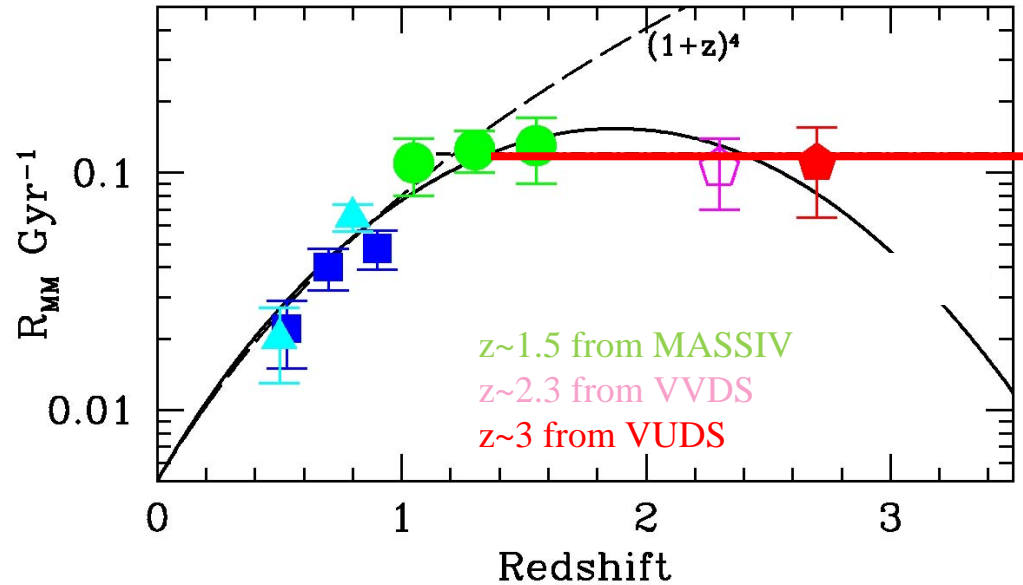
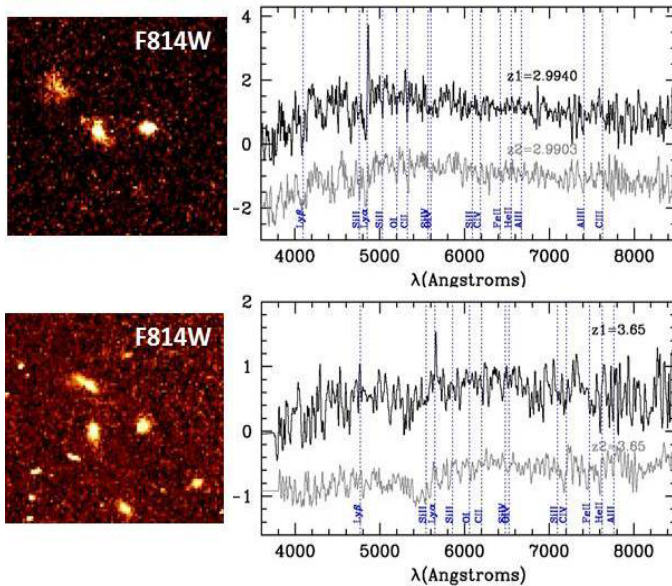
Progenitors of CMQ at $2 < z < 5$





Galaxy Merger Rate History since $z \sim 3$ from spectroscopic pairs

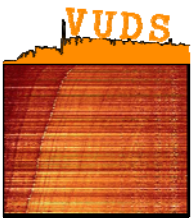
Le Fèvre et al. in prep.



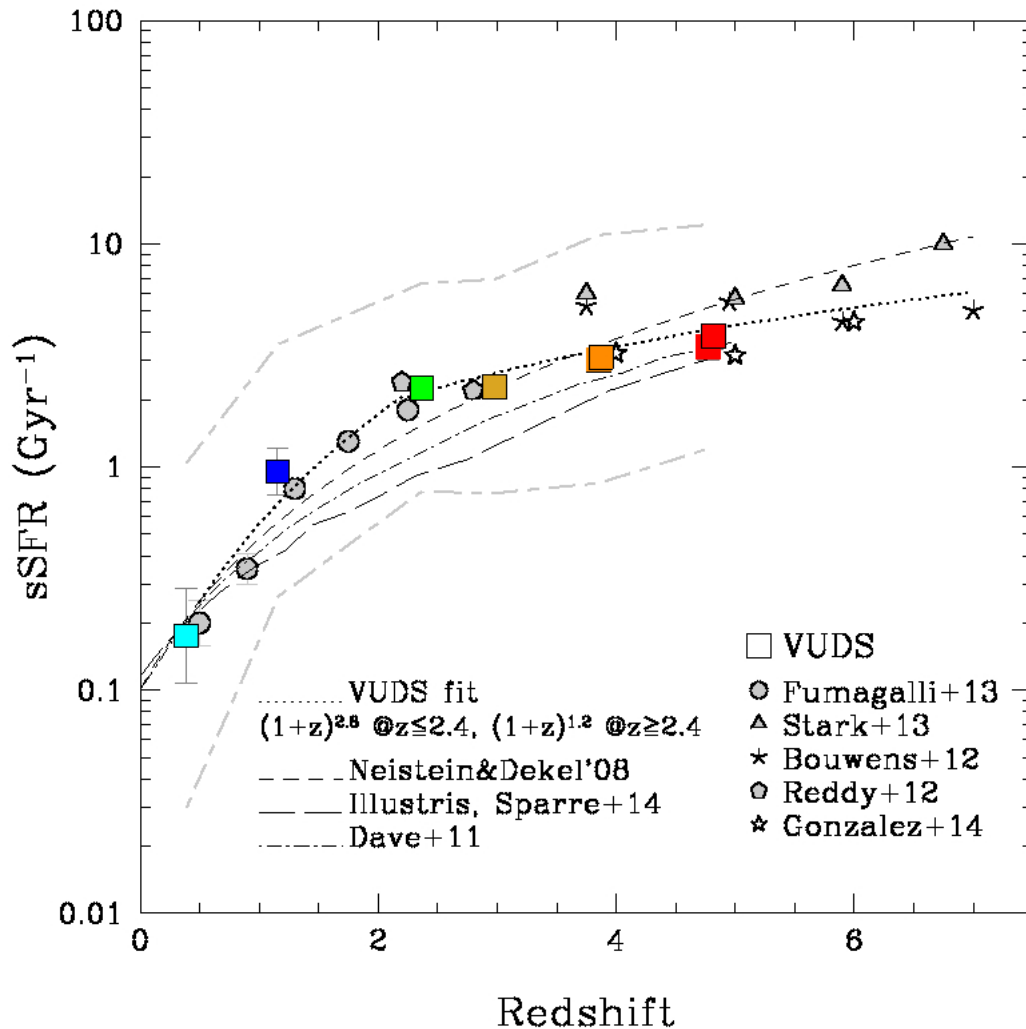
Tasca et al. 2014b

Peak in major merger rate
at $z \sim 1.5-2$?

Integrating the GMRH indicates that 60% of
the mass of galaxies at $z=0$ has been
assembled by mergers



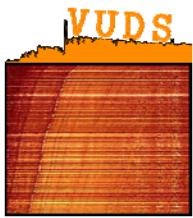
sSFR evolution since $z \sim 5$



The sSFR evolution does not follow a pure accretion driven galaxy mass growth.

Need to combine with merger processes.

Tasca et al. 2015



Take home message

VUDS is filling a window relatively un-probed with spectroscopy at $2 < z < 6$
~7500 galaxies with $z_{\text{spec}} > 2$

VUDS allows an unbiased and homogeneous study of the high-redshift universe
& to look for the inset of quenching

First data release: CANDELS area by Summer 2015

Stay tuned

*Thank you for your
attention*



VUDS | VIMOS Ultra Deep Survey