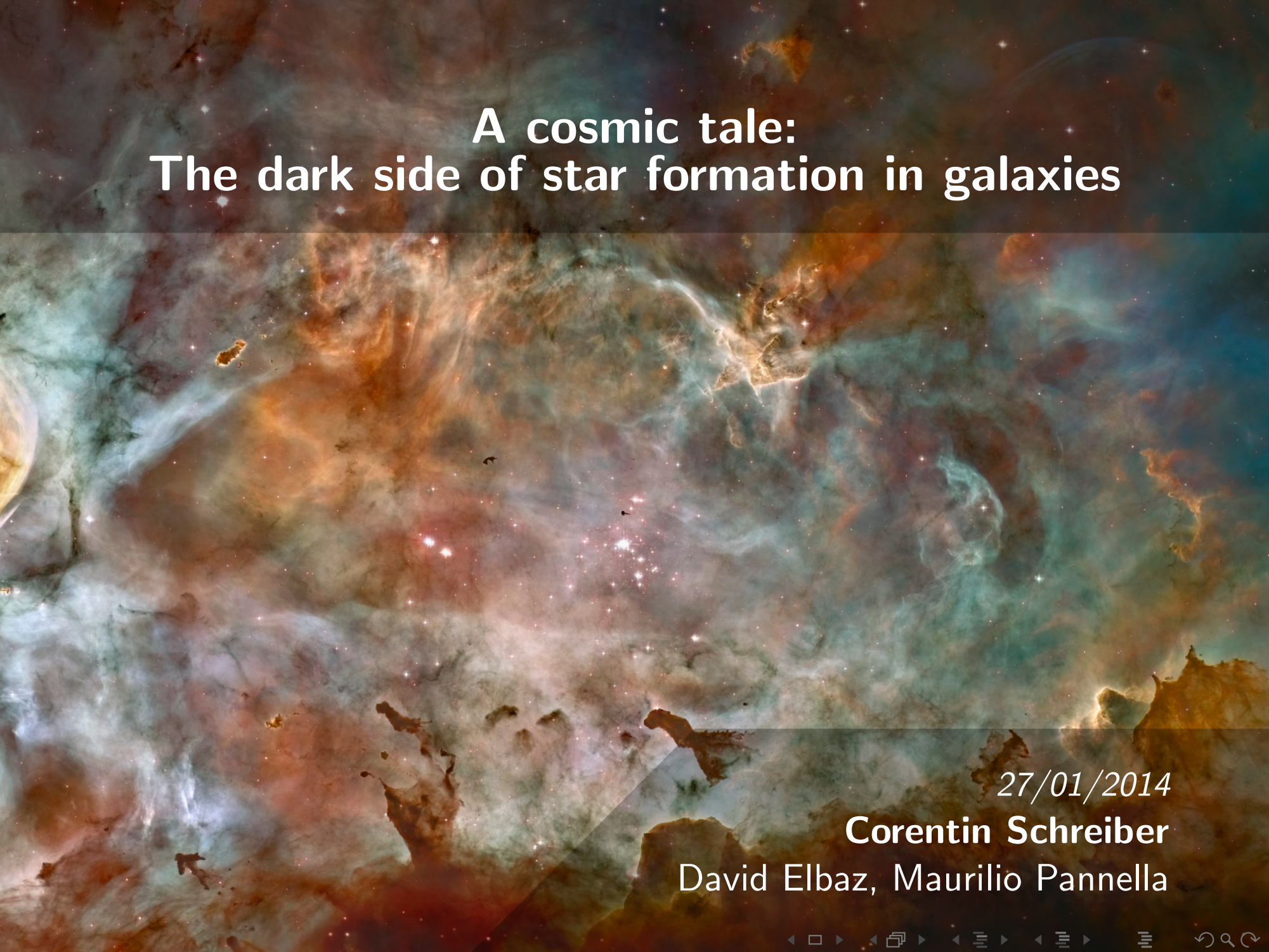


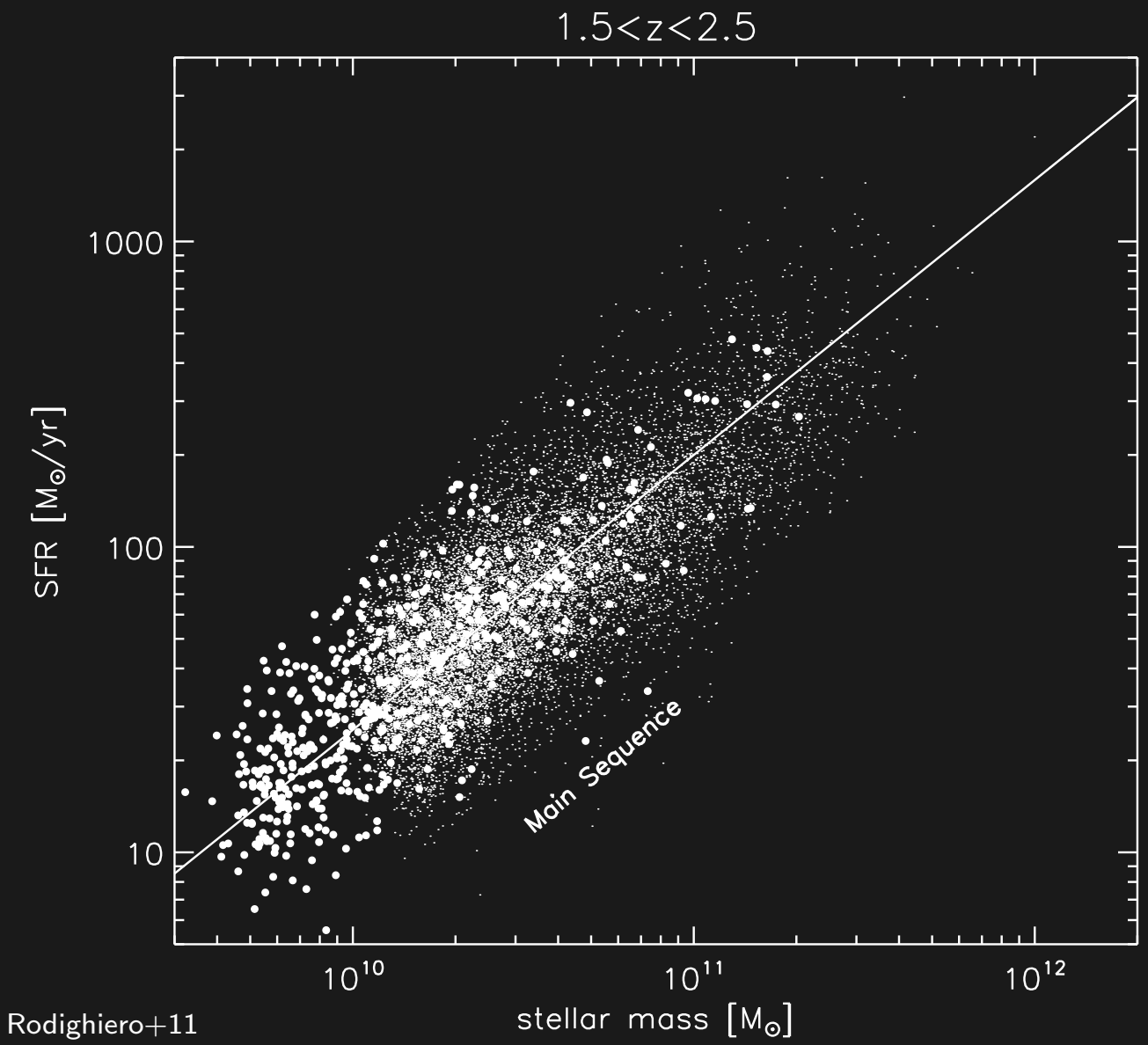
A cosmic tale: The dark side of star formation in galaxies

27/01/2014

Corentin Schreiber
David Elbaz, Maurilio Pannella

Background

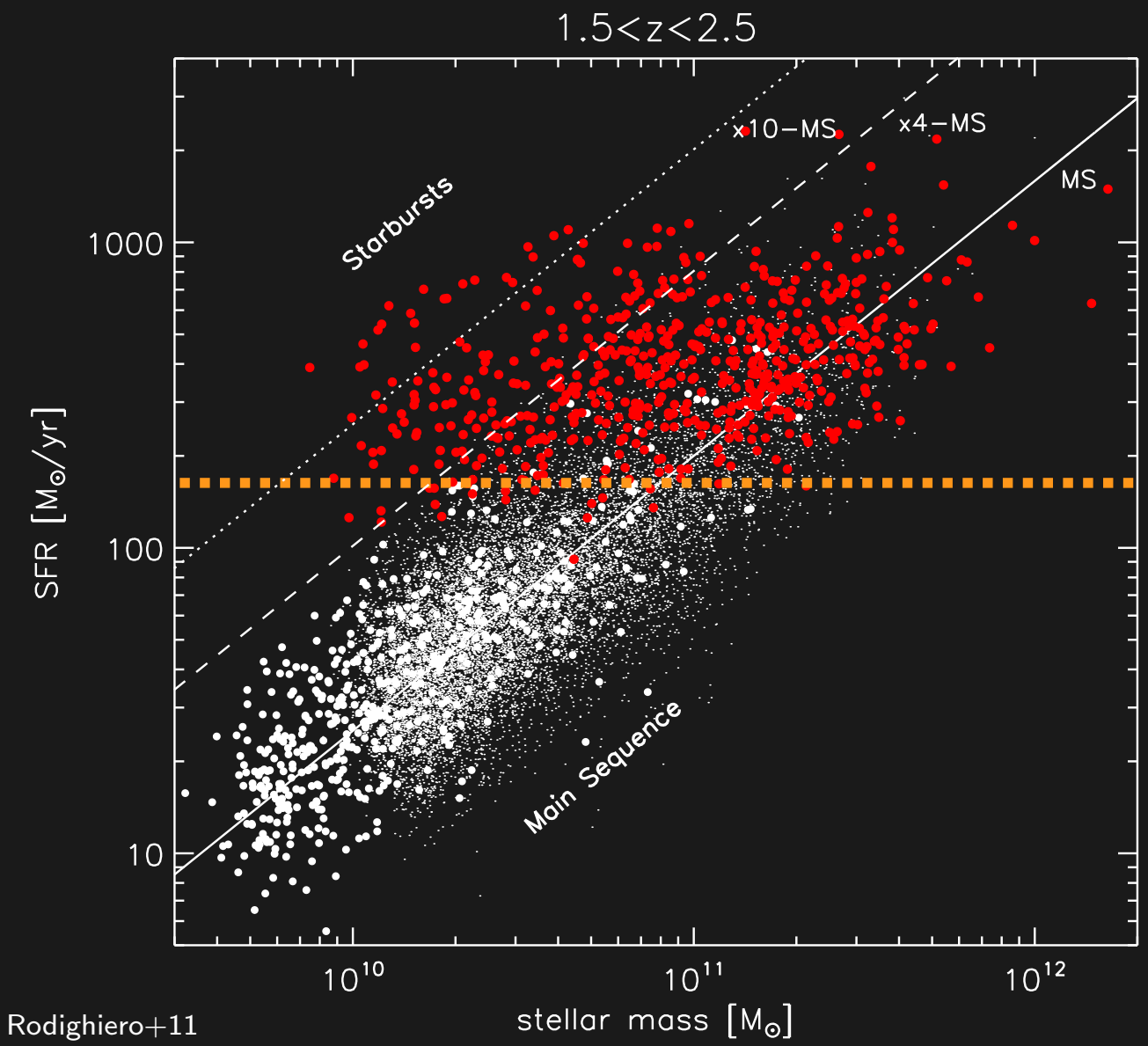
The main sequence of star formation



Rodighiero+11

Background

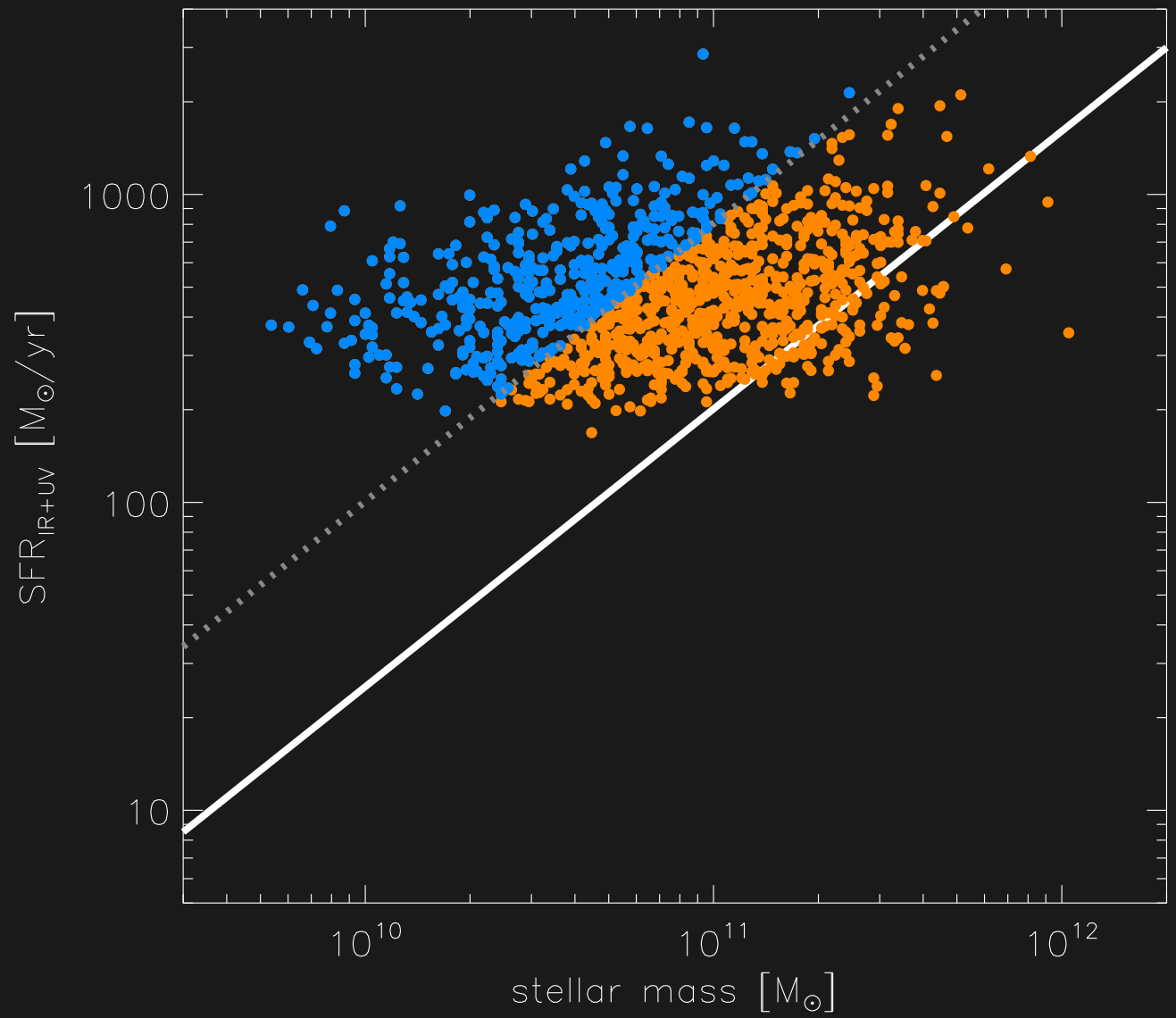
The main sequence of star formation



Rodighiero+11

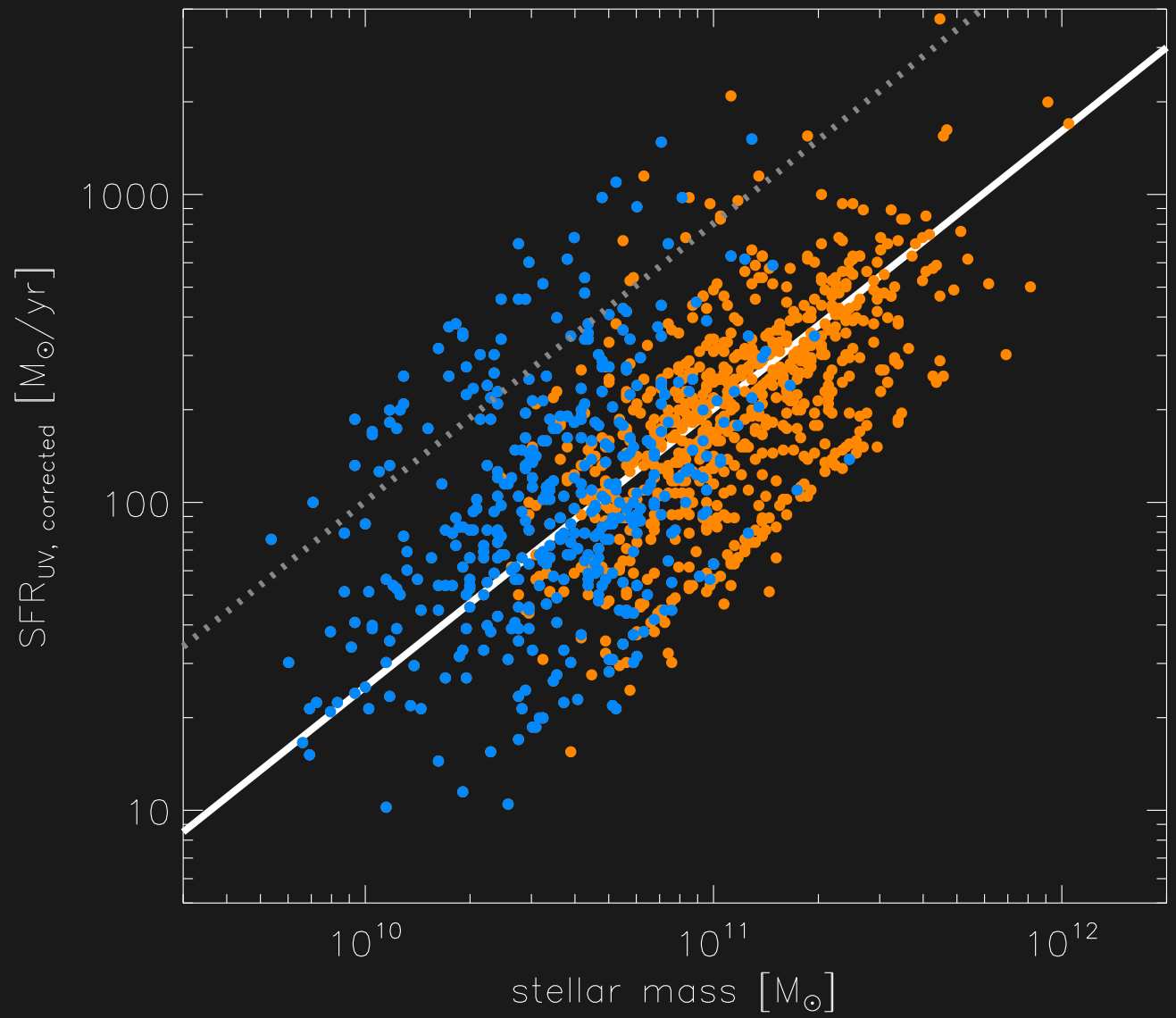
Background

The problem of dust extinction

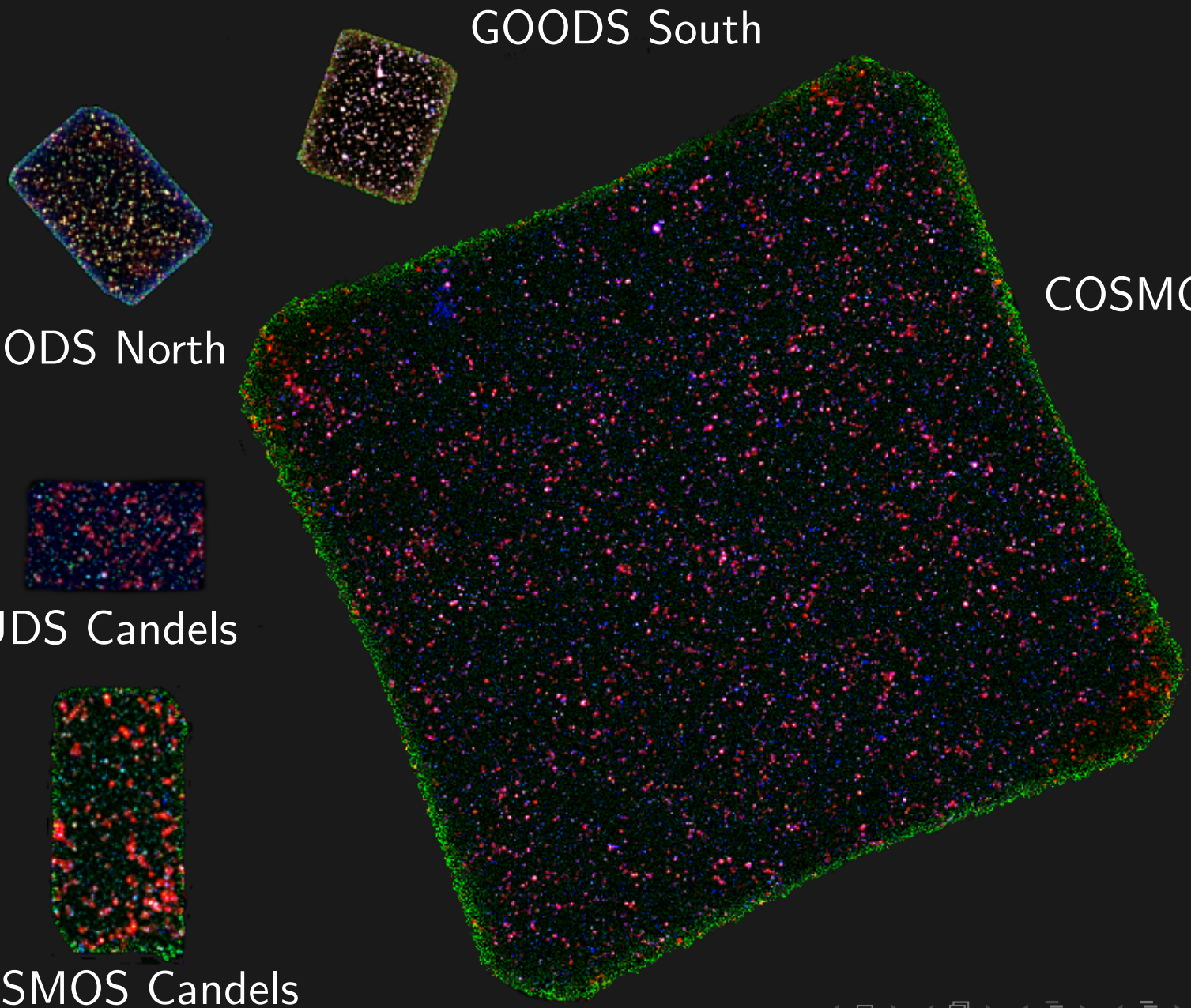


Background

The problem of dust extinction

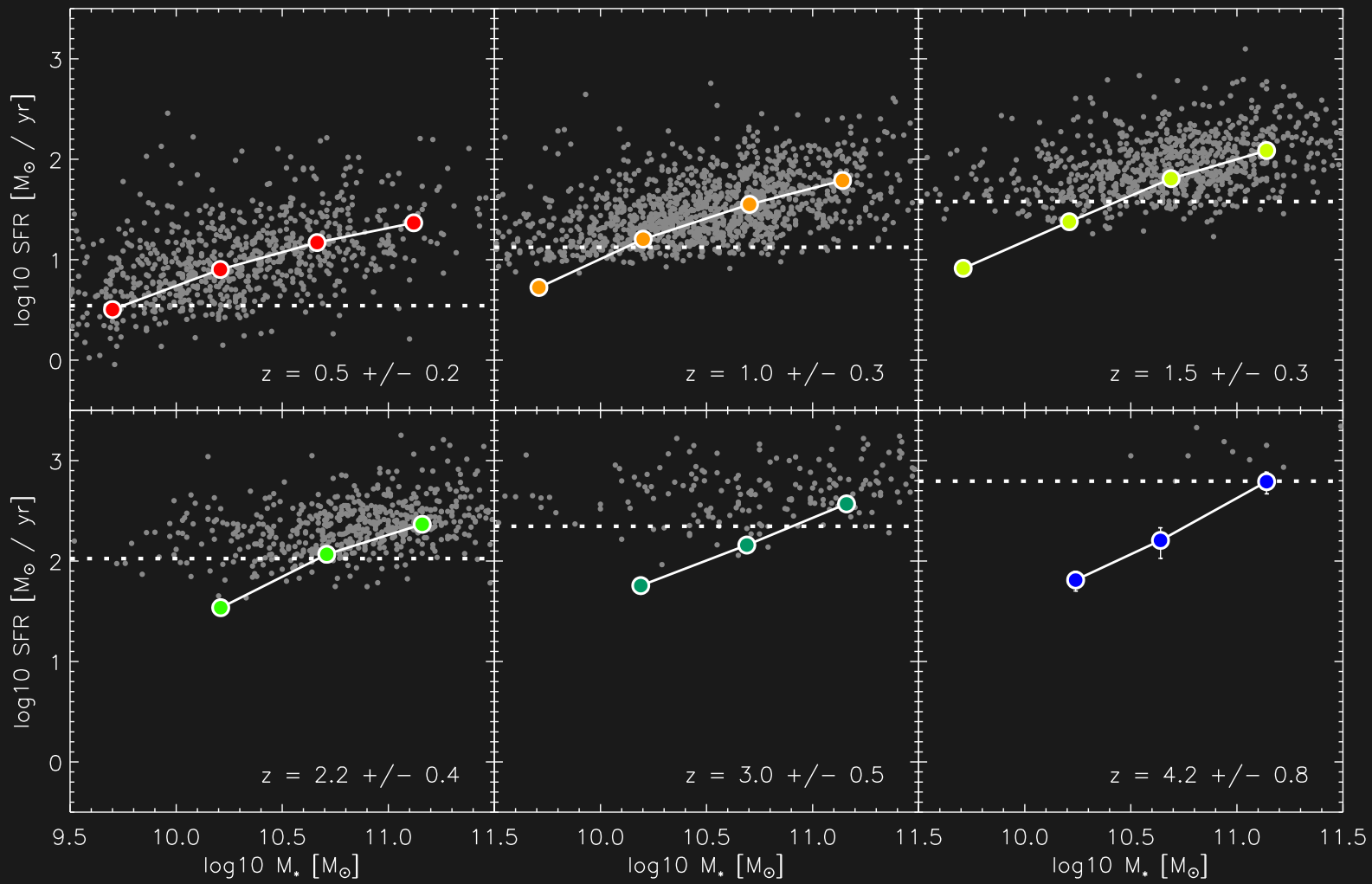


The fields


GOODS South
GOODS North
COSMOS 2□°
UDS Candels
COSMOS Candels

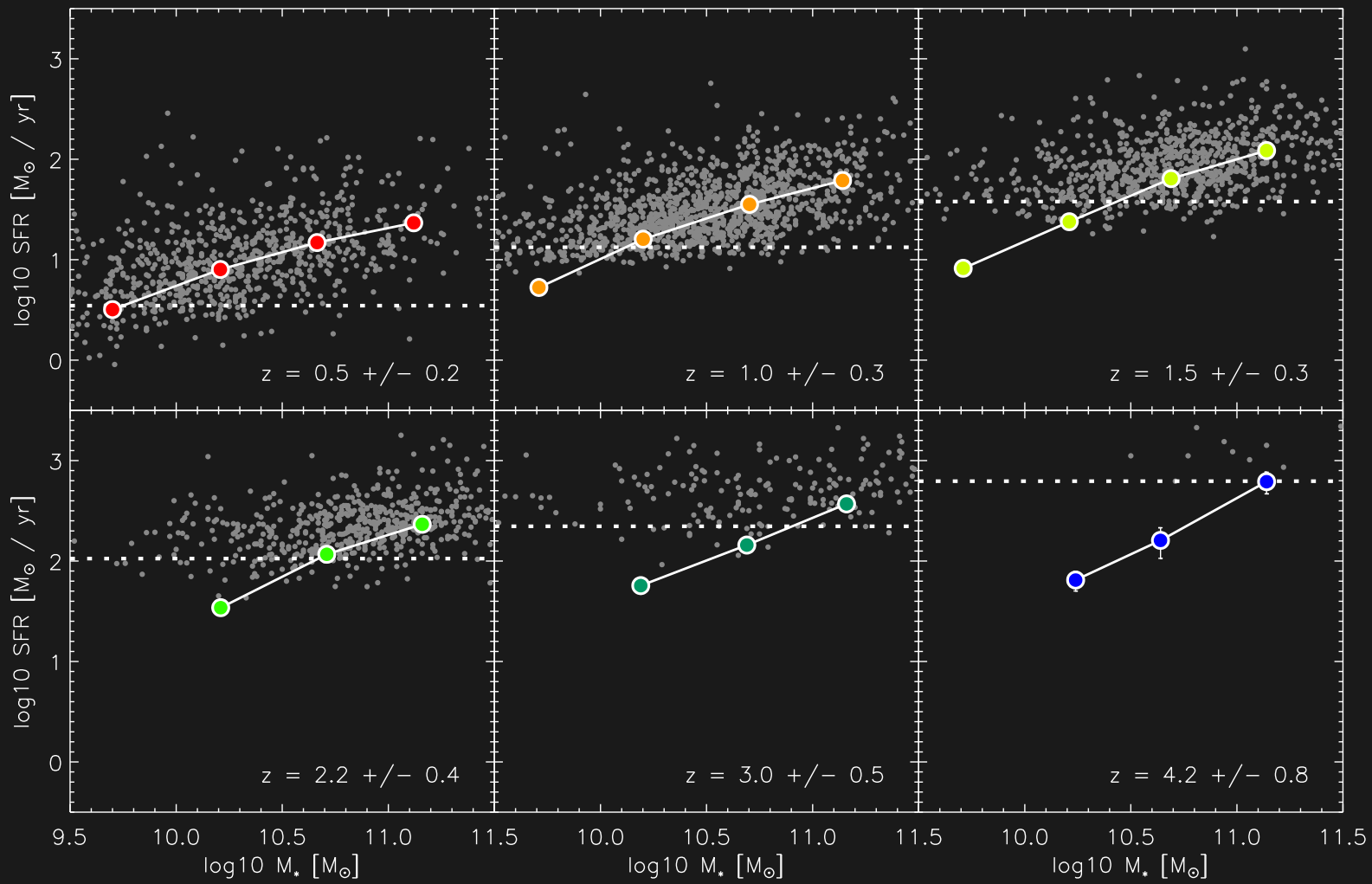
The main sequence of star formation

As seen from individual detections



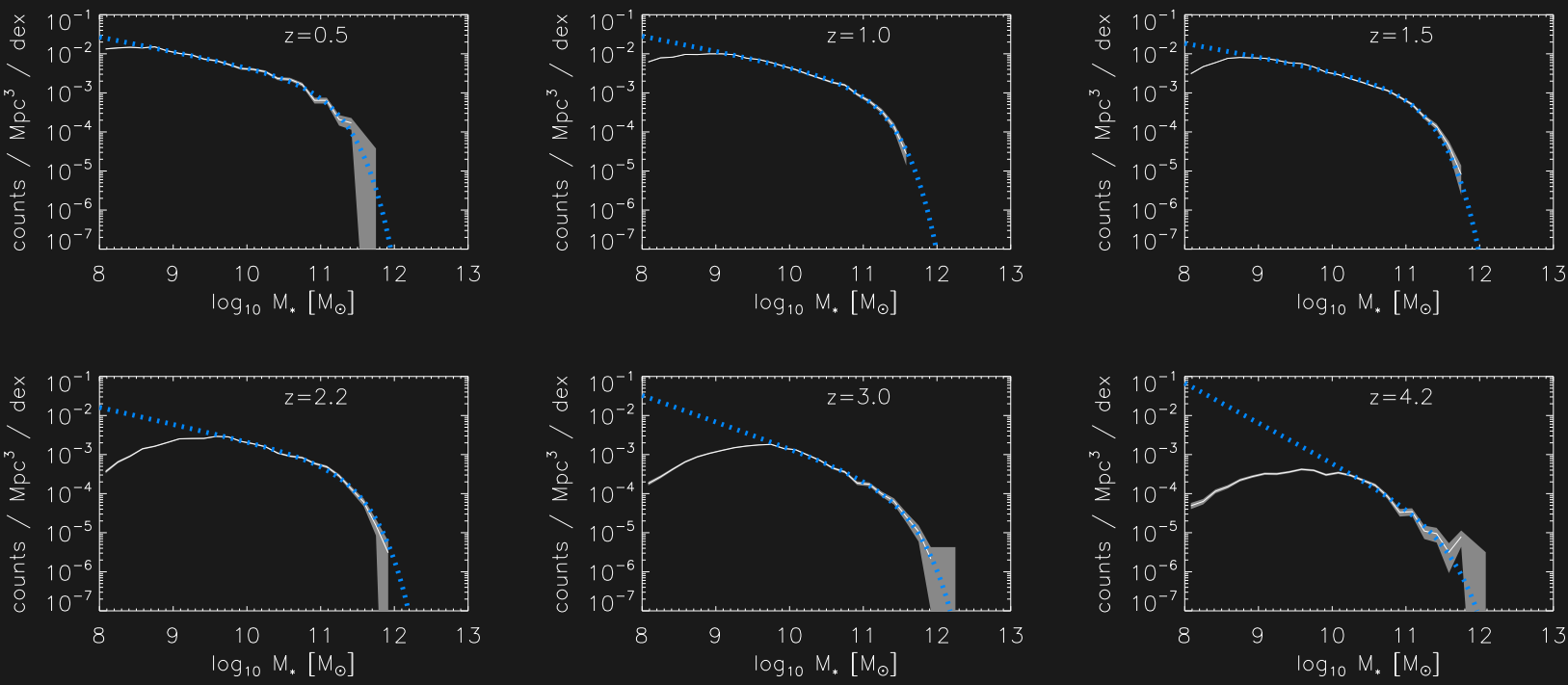
The main sequence of star formation

As seen from stacking: normalization



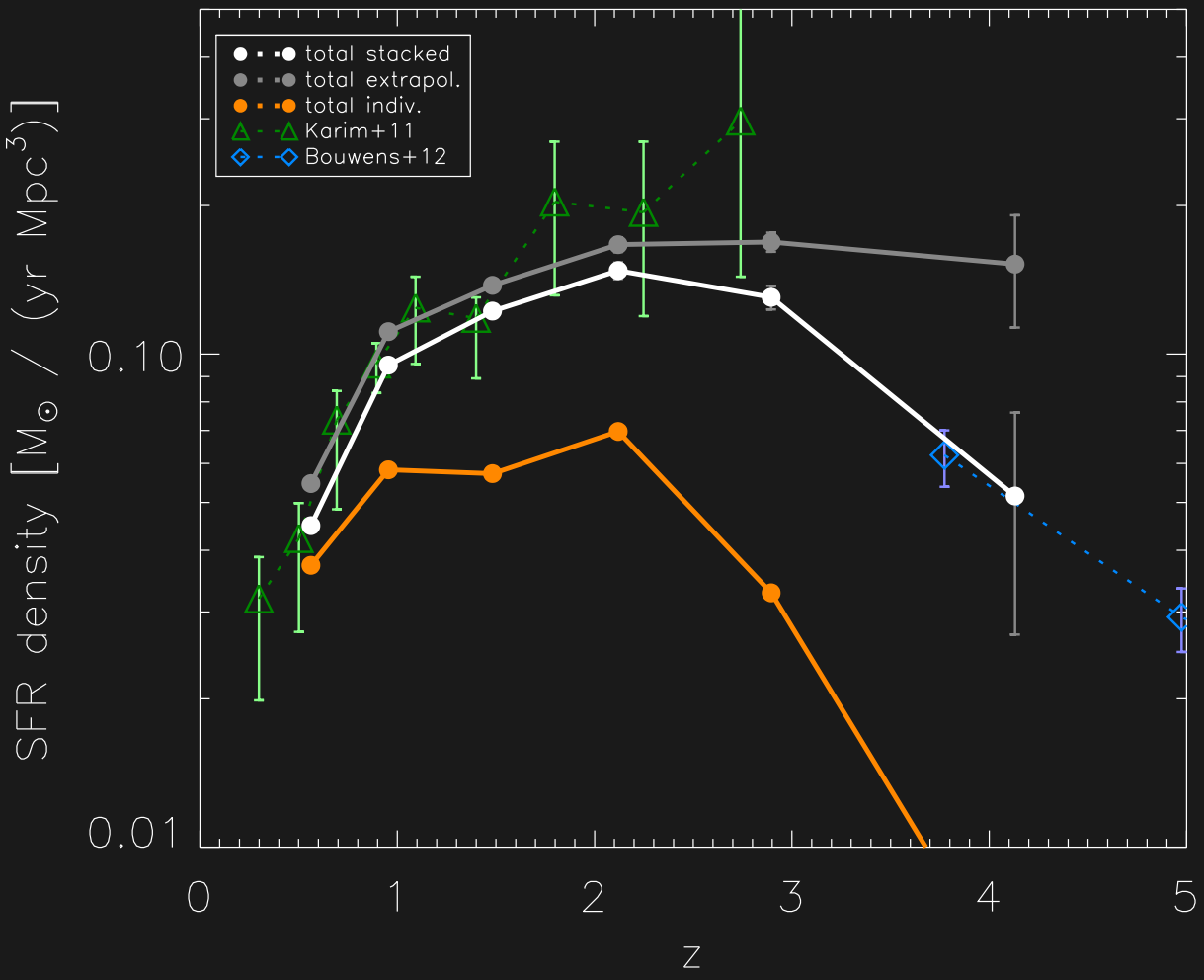
The main sequence of star formation

As seen from stacking: SFR density



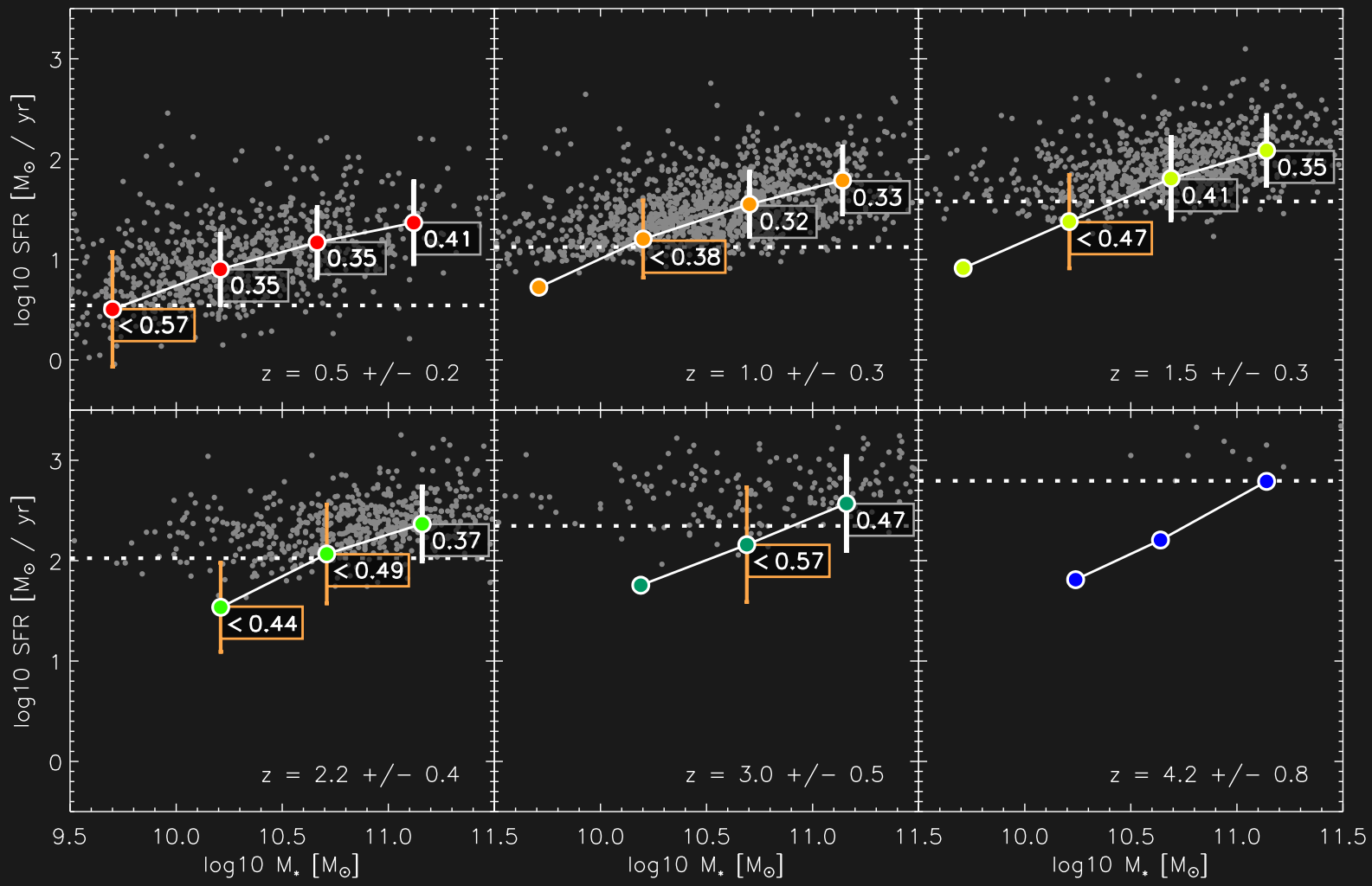
The main sequence of star formation

As seen from stacking: SFR density



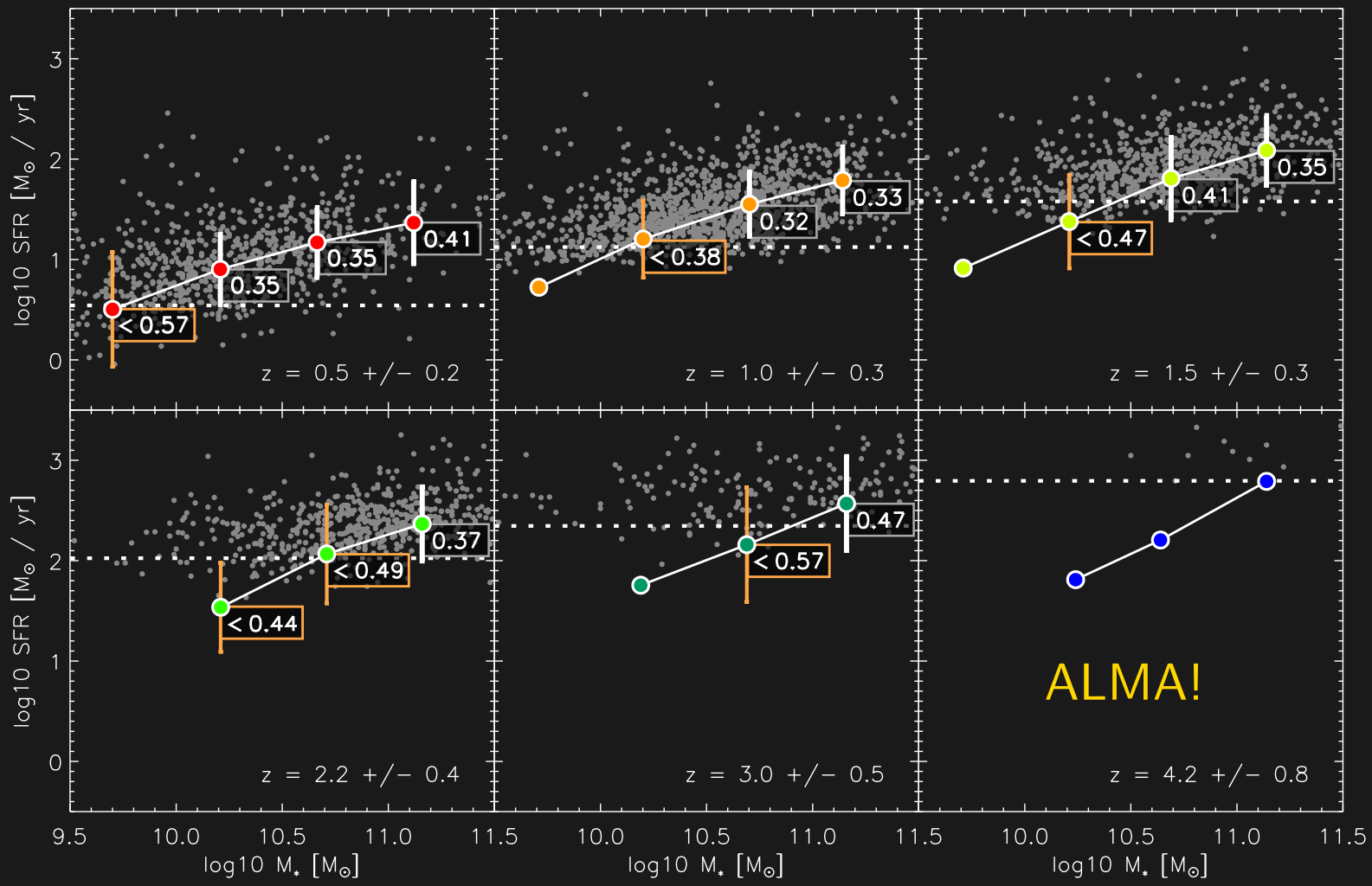
The main sequence of star formation

As seen from stacking: dispersion



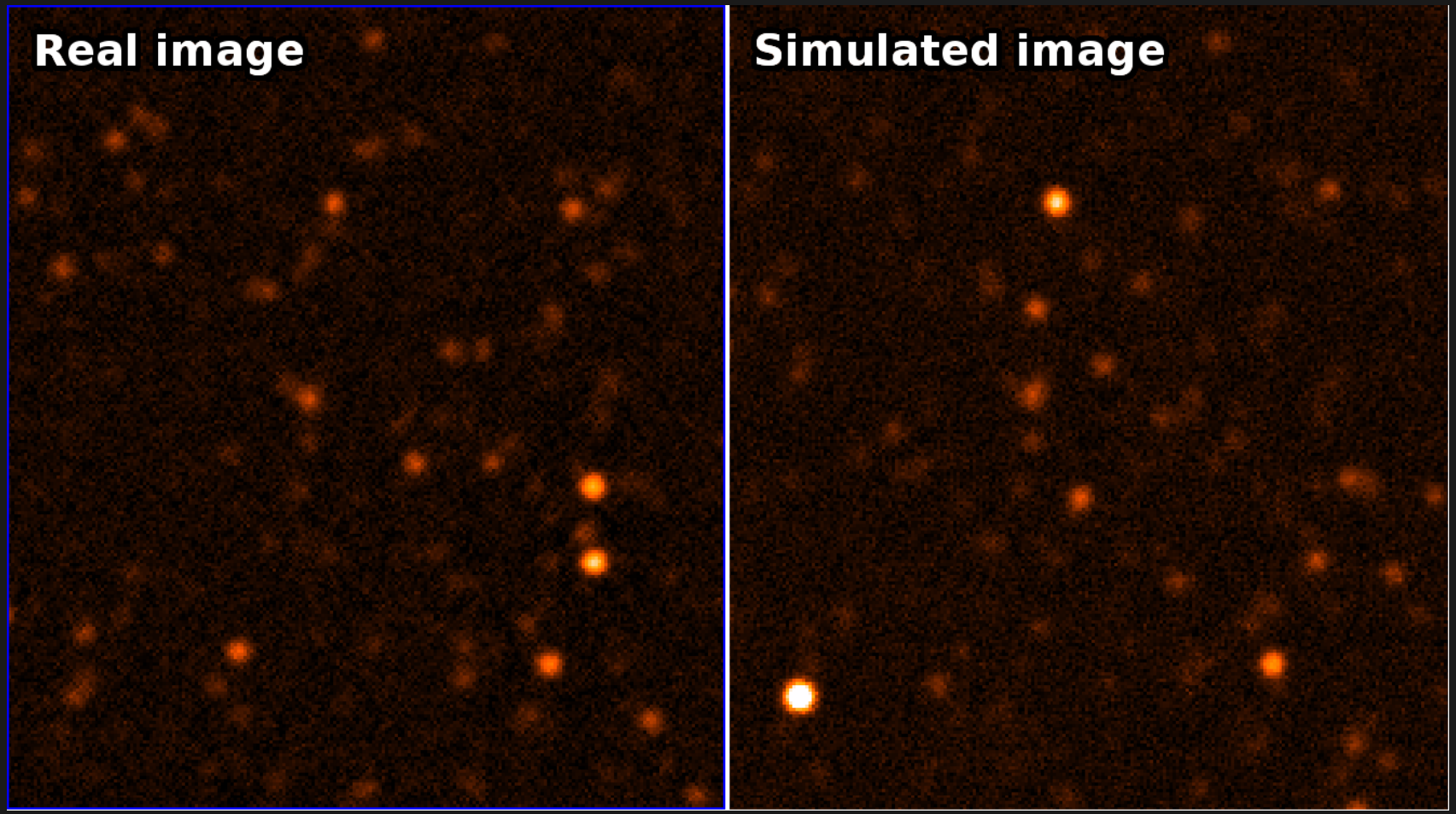
The main sequence of star formation

As seen from stacking: dispersion



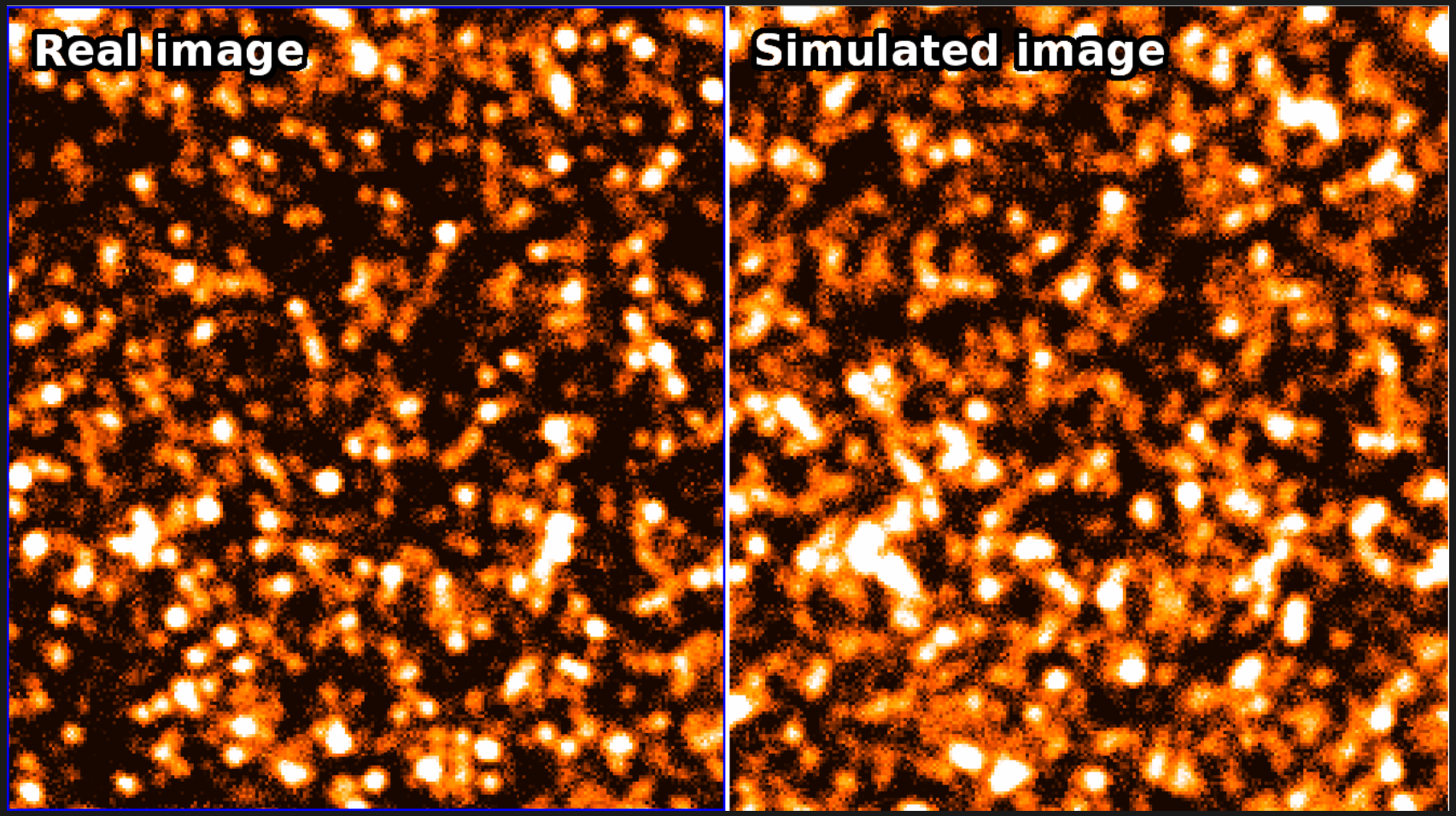
On the technical side

Simulated maps



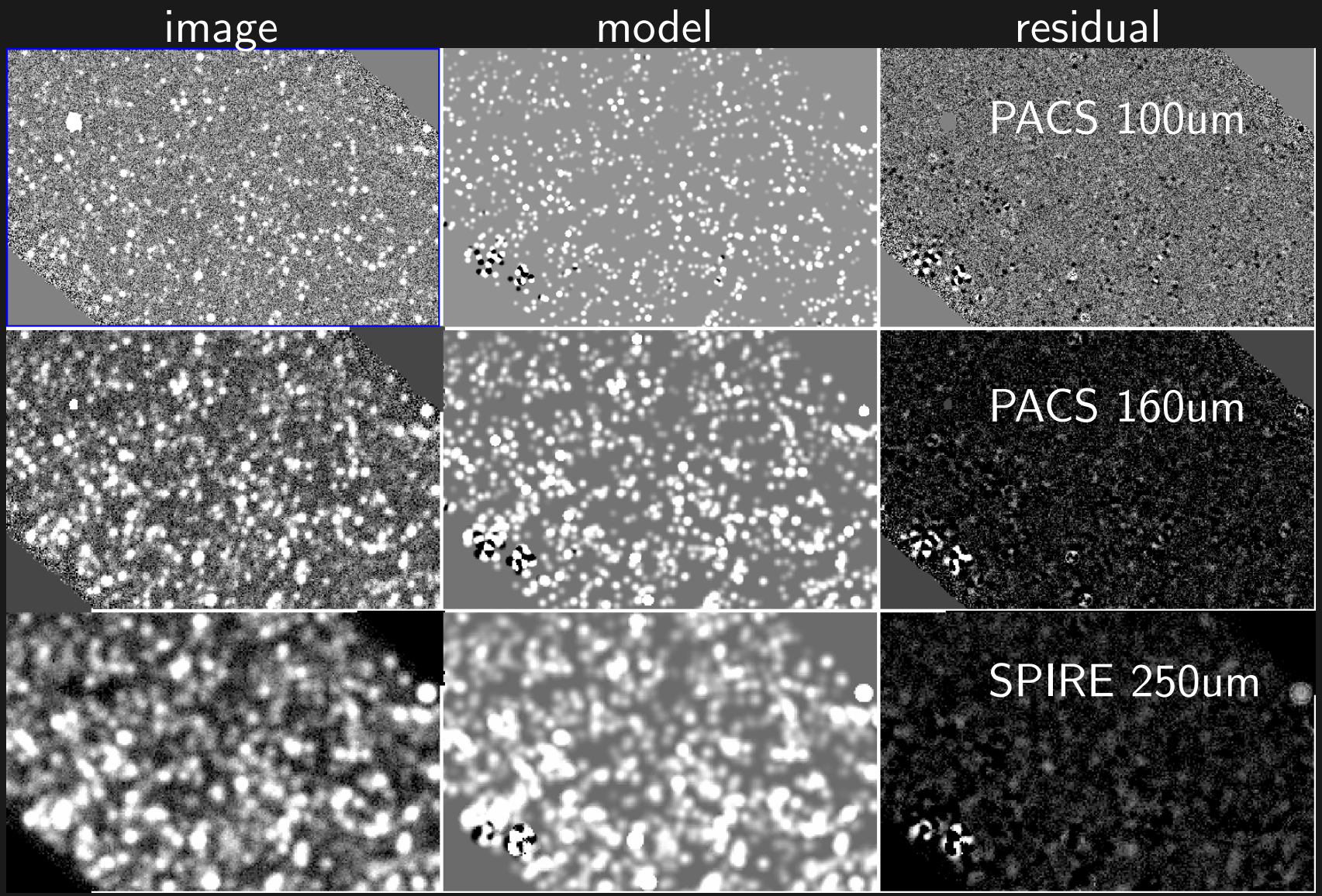
On the technical side

Simulated maps



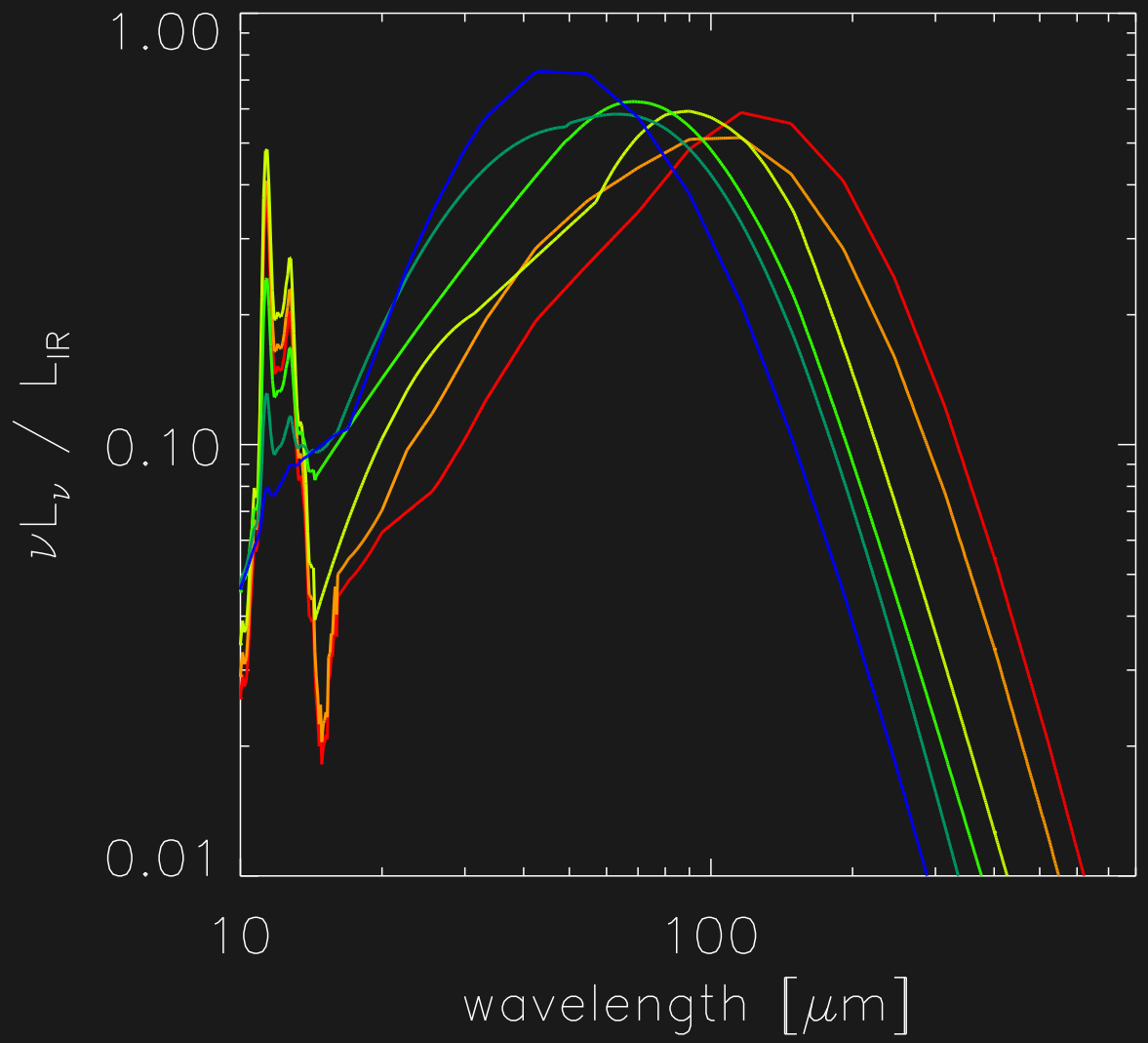
pixfit

Still work in progress...



pixfit

Picking the right SED



The main sequence of star formation

As seen from stacking: dispersion

- stack the images by computing the median absolute deviation

→ create a "dispersion image"

→ extract dispersion using $\text{image}^2 = {\sigma_{\text{noise}}}^2 + {\sigma_{\text{dispersion}}}^2 \, \text{PSF}^2$

