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# CLUSTER-Z INDIVIDUAL MEASUREMENTS

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**In collaboration with:  
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# Cluster-z Individual measurements

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**I Concept**

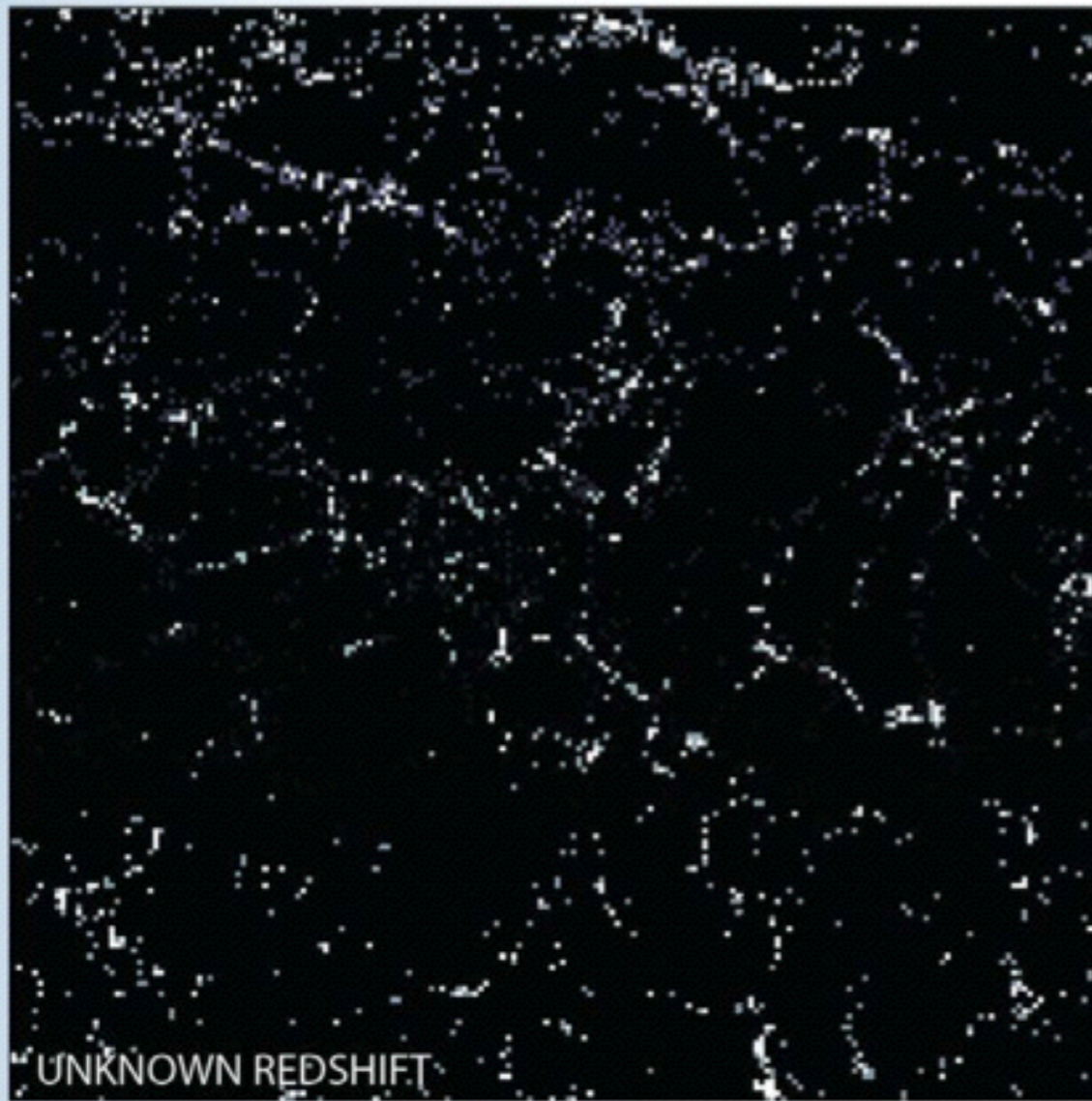
**II Preselection in colors space**

**III Individual measurements: preliminary results**

**IV Next step: explore the Euclid Mice 2 simulation**

# Concept:

SELECTED SAMPLE

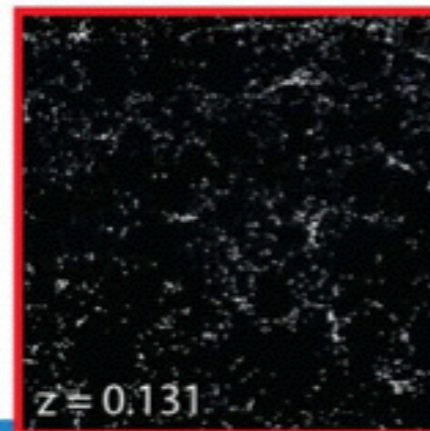
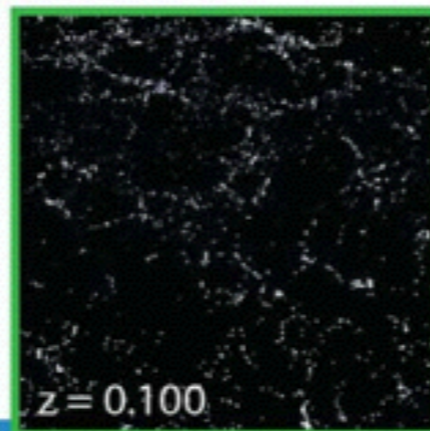
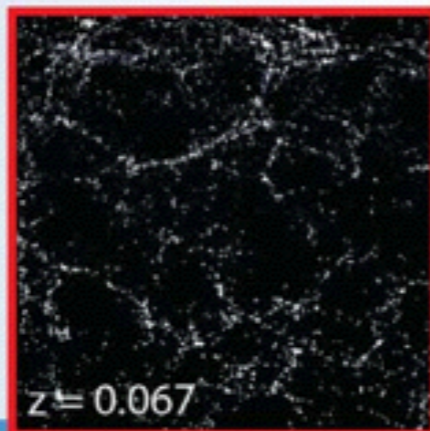
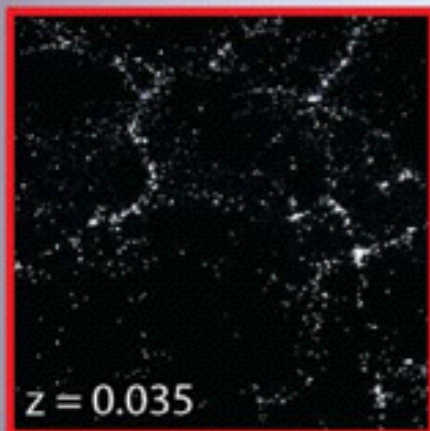


Matching on-sky structure in reference redshift slice with selected (unknown) sample

$$\langle \delta_{\text{ref}} \cdot \delta_{\text{unknown}} \rangle$$

Metric: 2-point correlation function

REFERENCE SLICES



$z = 0.035$

$z = 0.067$

$z = 0.100$

$z = 0.131$

REDSHIFT

**I Concept**

**II Preselection in colors space**

**CFHTLS  $i_{AB} < 22.5$  & VIPERS  $i_{AB} < 22.5$**

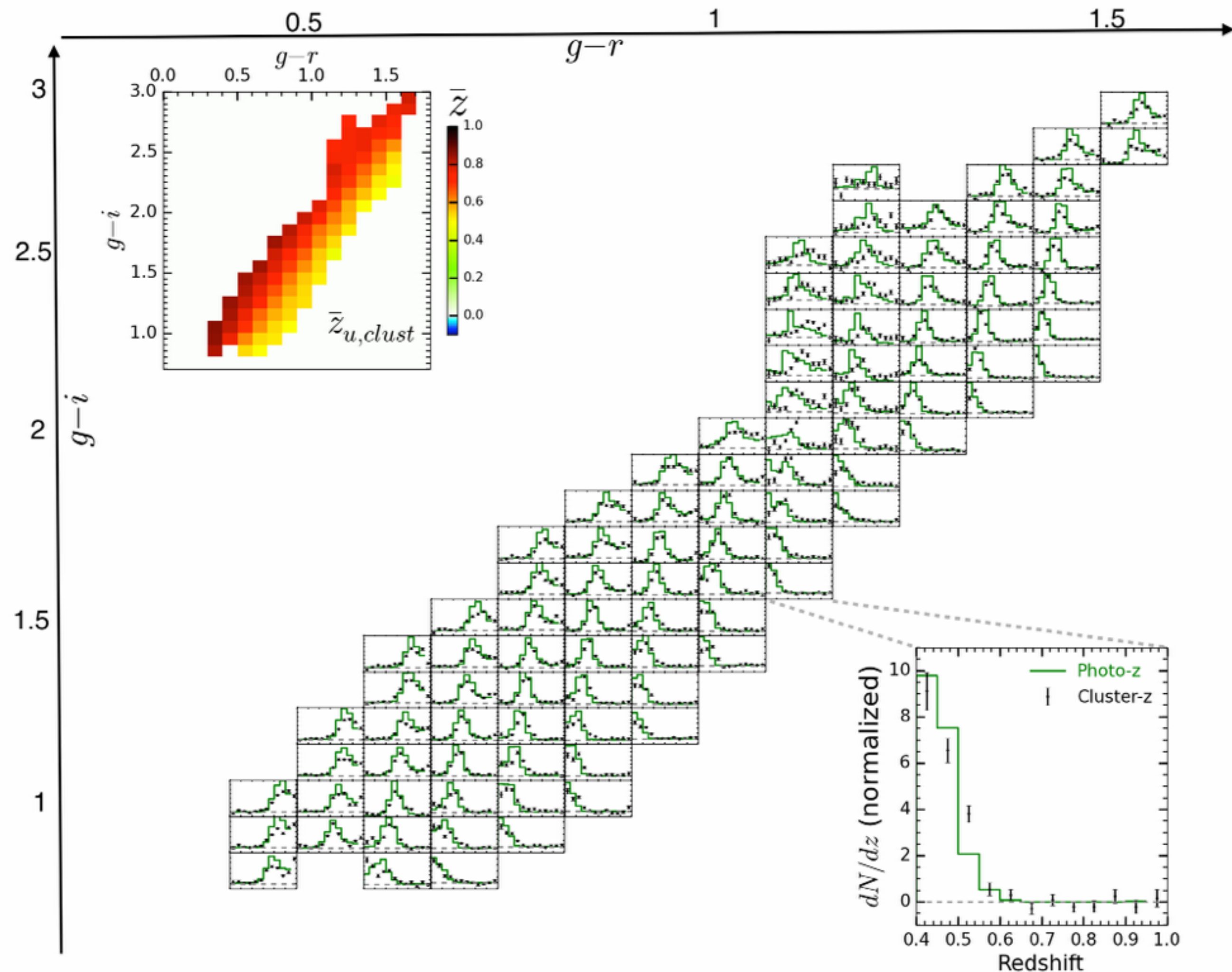
**130k galaxies**

**30k galaxies**

**III Individual measurements: preliminary results**

**IV Next step: explore the Euclid Mice 2 simulation**



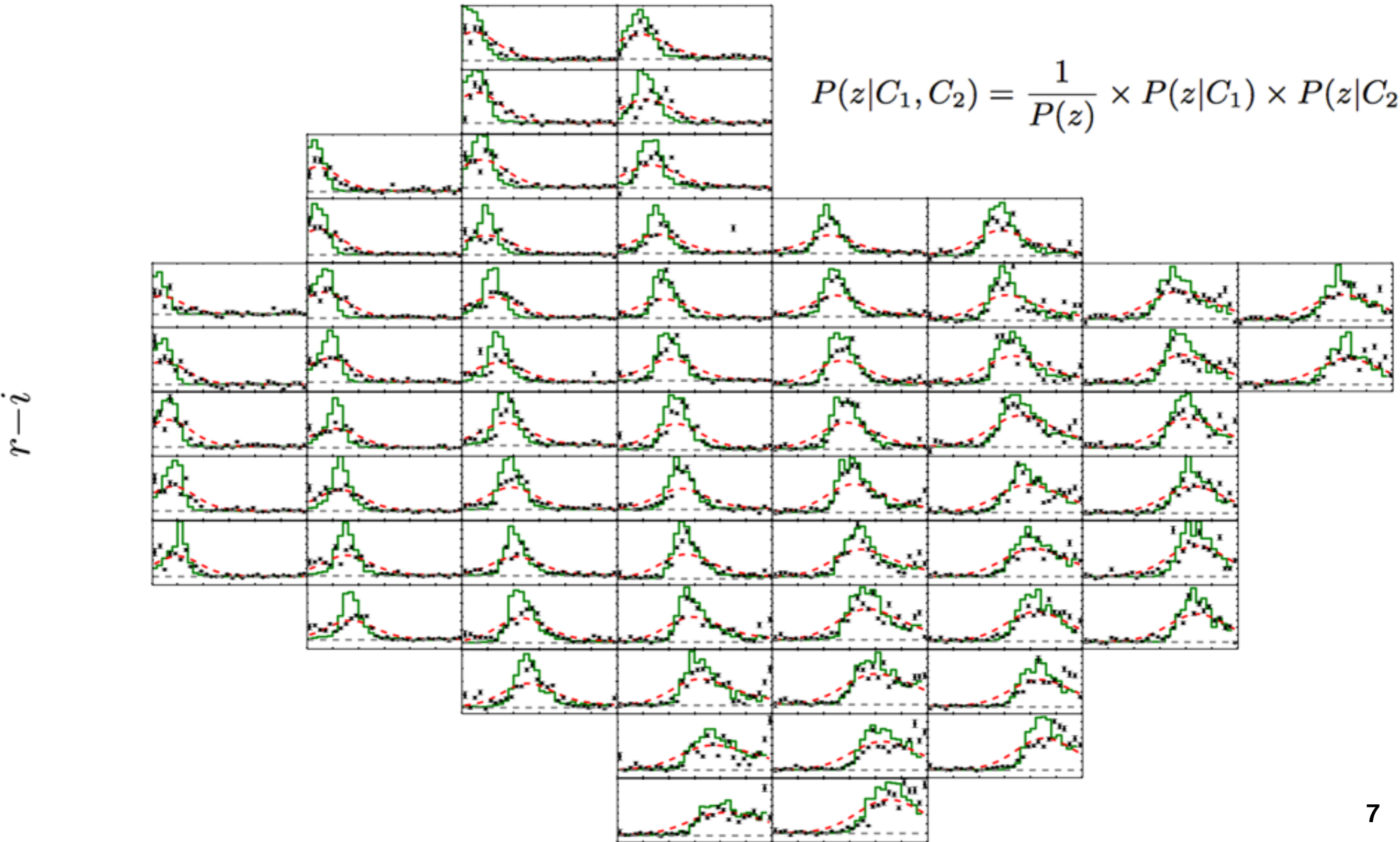


- I Concept**
- II Preselection in colors space**
- III Individual measurements: preliminary results**  
**Combining PDFs from colors space**
- IV Next step: explore the Euclid Mice 2 simulation**

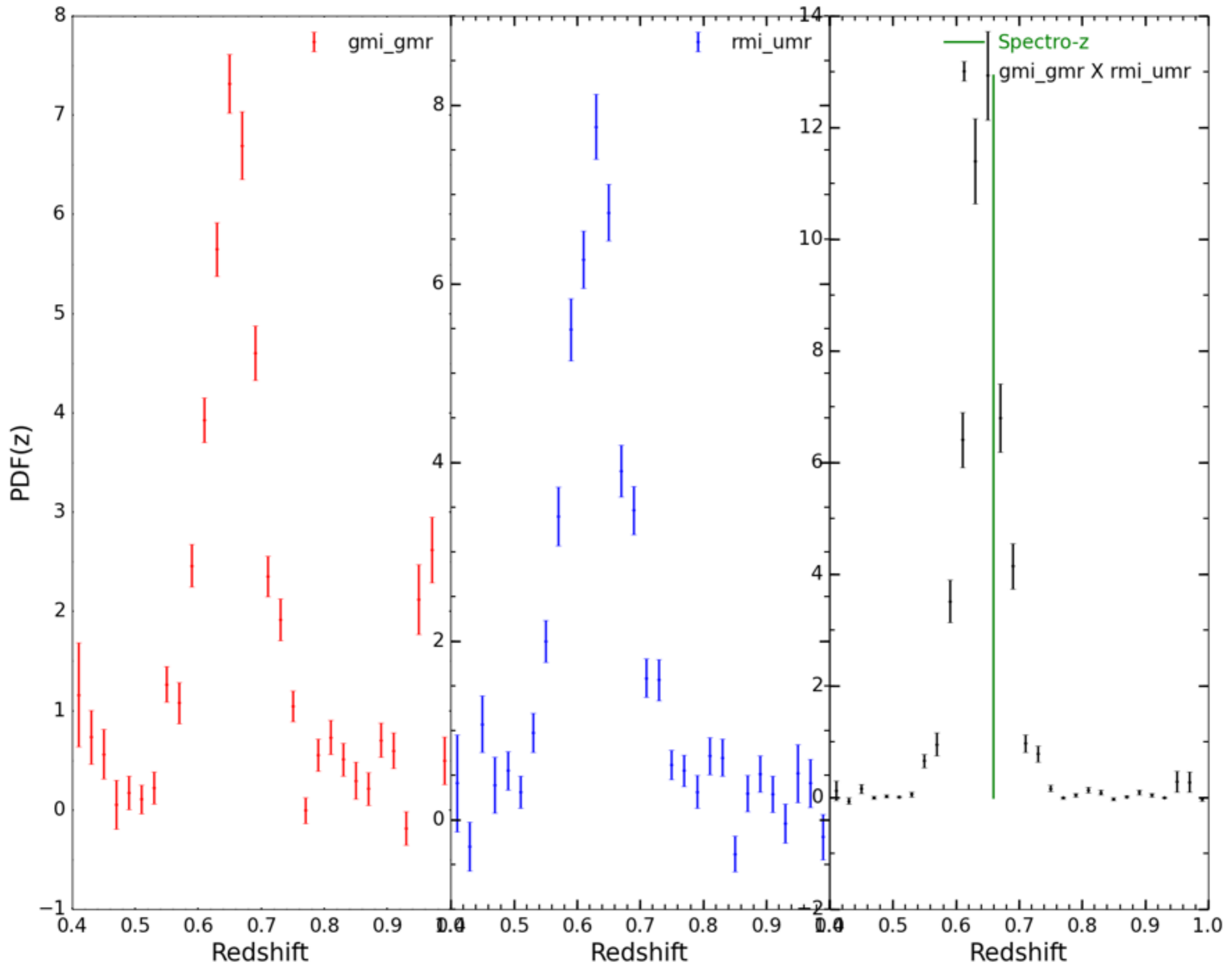
# Individual measurements: preliminary results

$u-r$

$$P(z|C_1, C_2) = \frac{1}{P(z)} \times P(z|C_1) \times P(z|C_2)$$

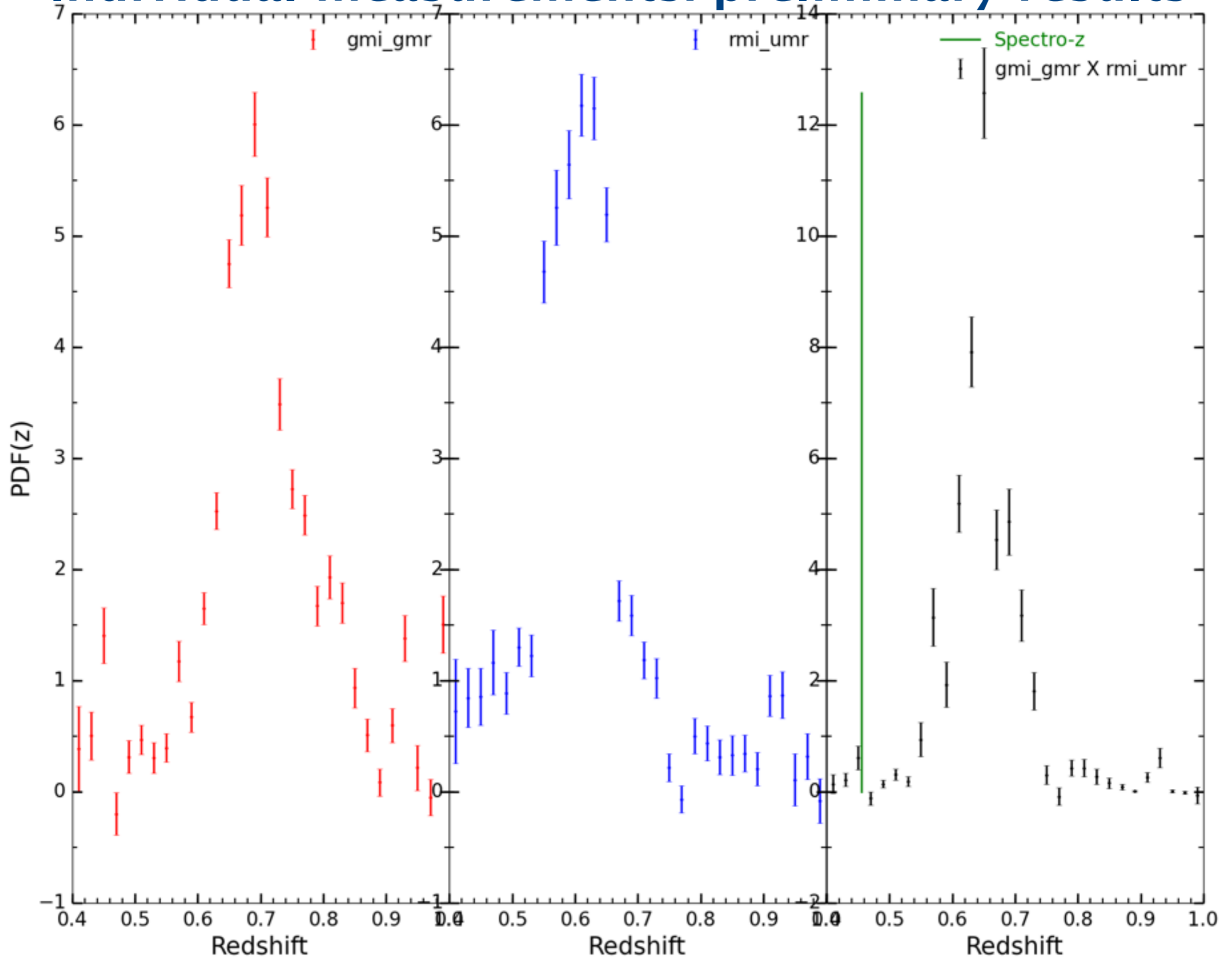


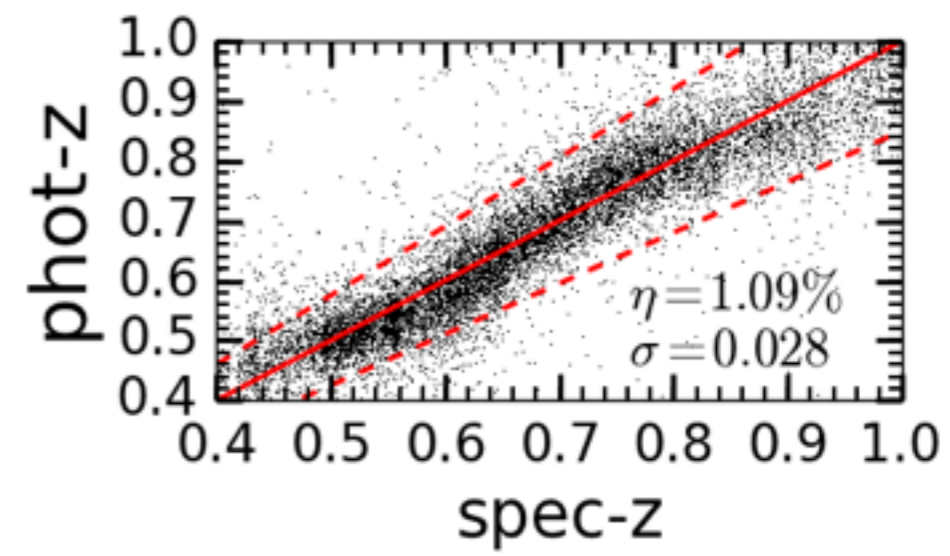
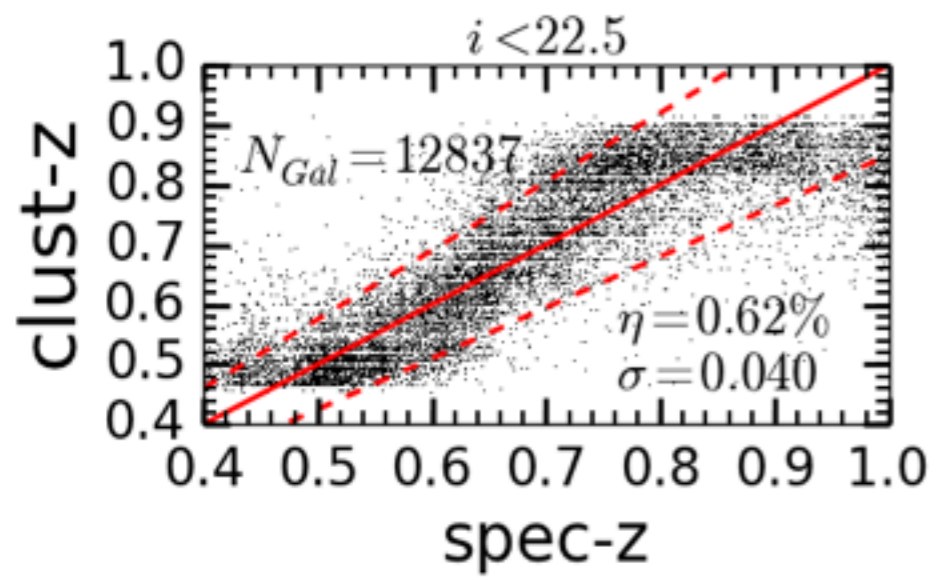
# Individual measurements: preliminary results

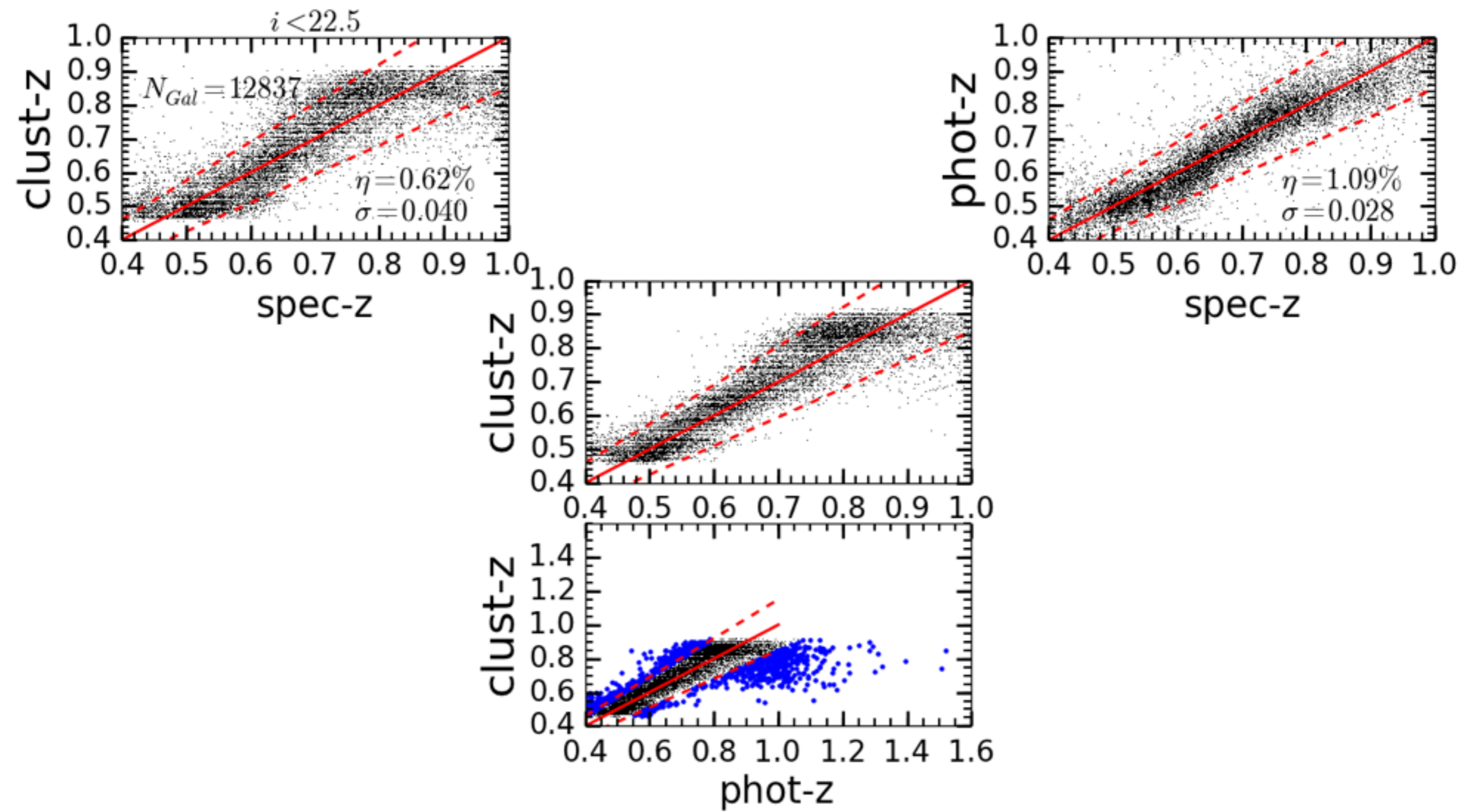


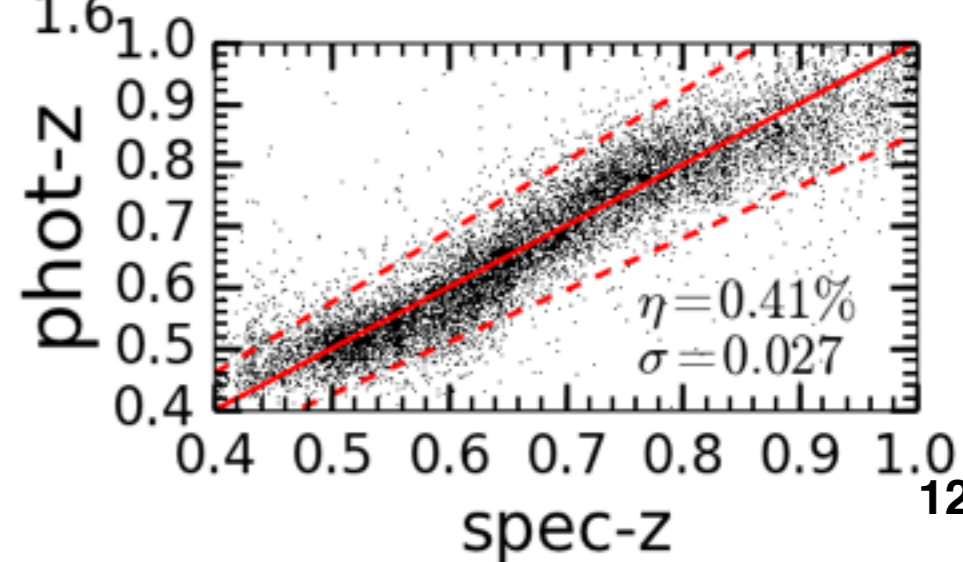
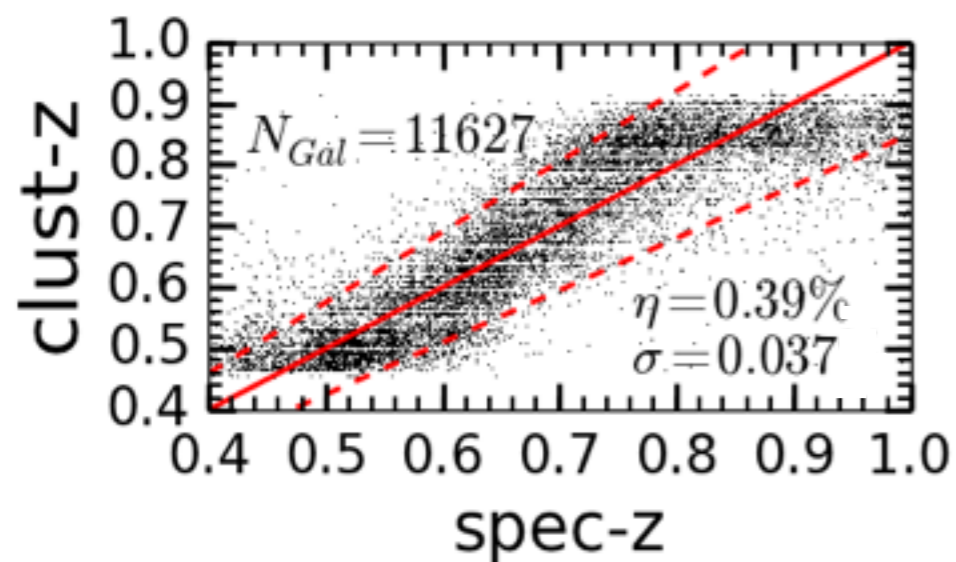
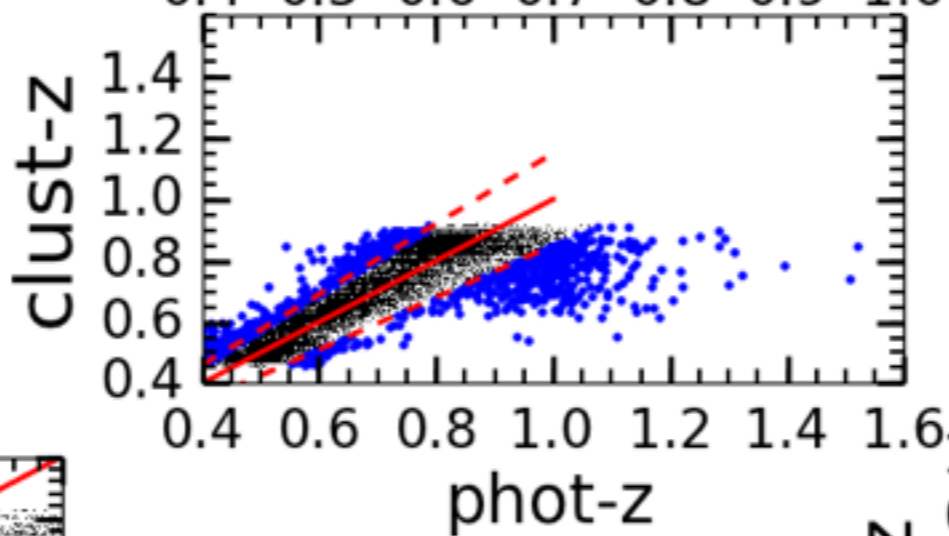
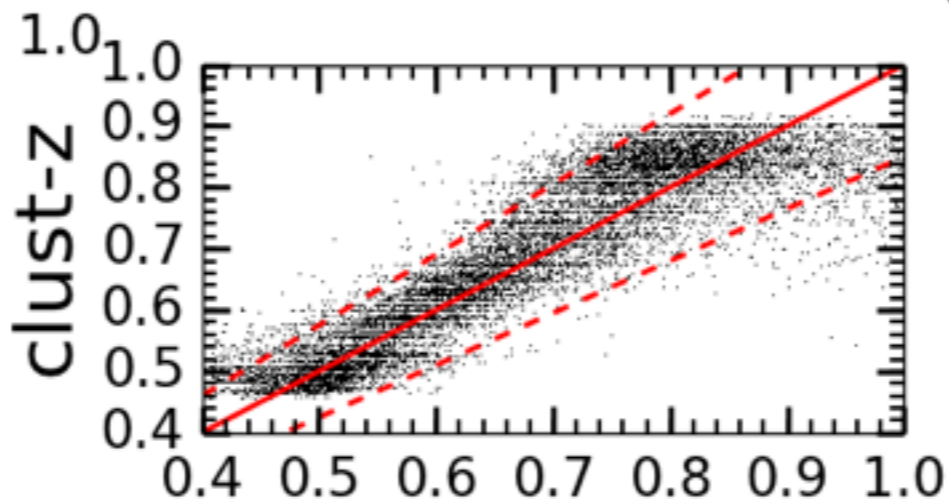
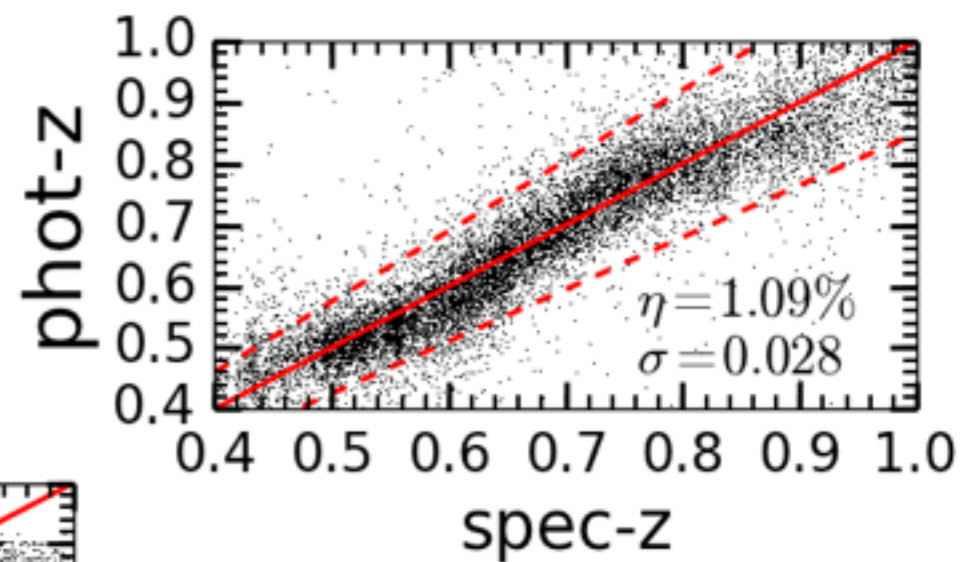
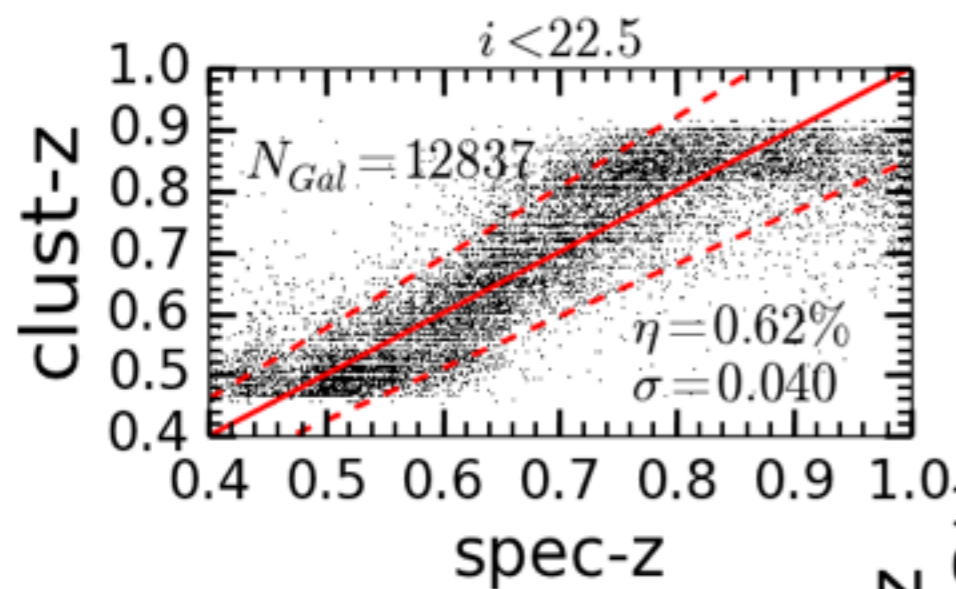


# Individual measurements: preliminary results



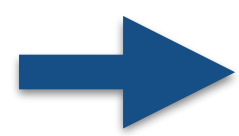




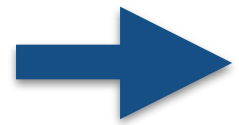




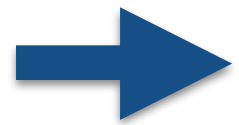
# Next step: explore Euclid Mice2 simulation



**Get individual redshifts using the full colors and morphology information available with Euclid**



**Perform a tomographic weak lensing analysis based on cluster-z and quantify the gain when combining with photo-z**



**Suggestions are welcome**