

# Ideas for Large Programs (1)

Wei-Hao Wang's talk

- An Extension of 450um Deep Map
  - **Make full use of the unique window only available with JCMT/SCUBA-2**
  - S2CLS & STUDIES \*3  $\rightarrow$   $\sim 450 \text{ arcmin}^2$
  - $\sim 200$  sources for robust statistics
  - A sample of  $>25$  star-forming galaxies at  $z > 4$
  - $\sim 10\text{-}30$  extremely-cold-dust galaxies at  $z < 1.4$

# Ideas for Large Programs (2)

Talk by Nagayoshi Ohashi – **go deep and wider**

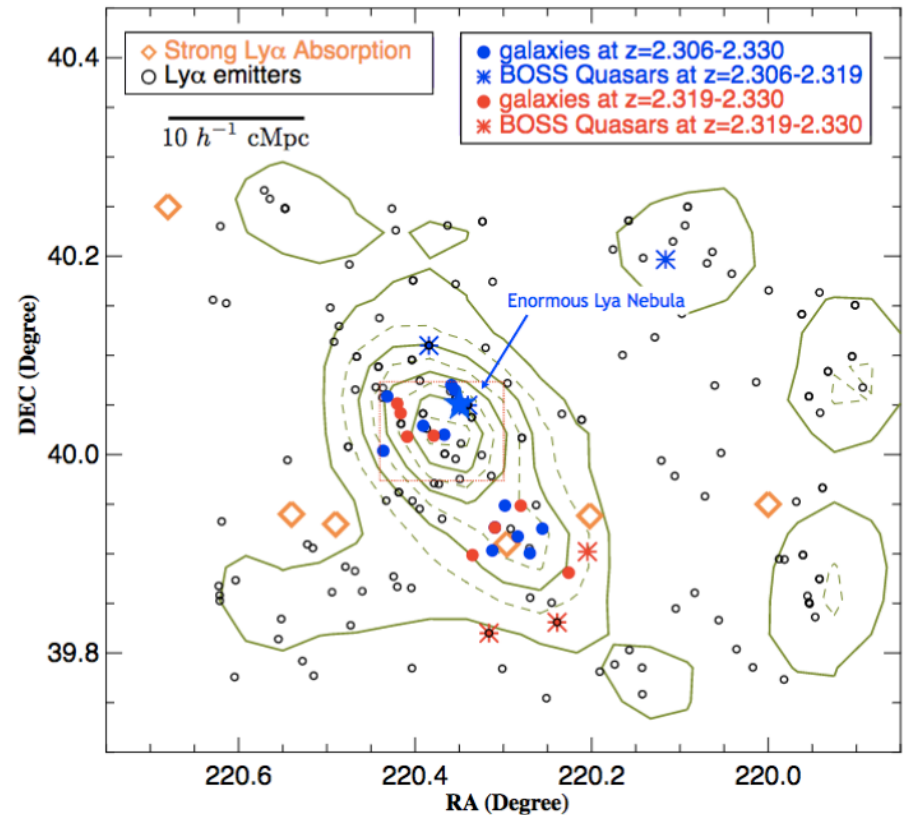
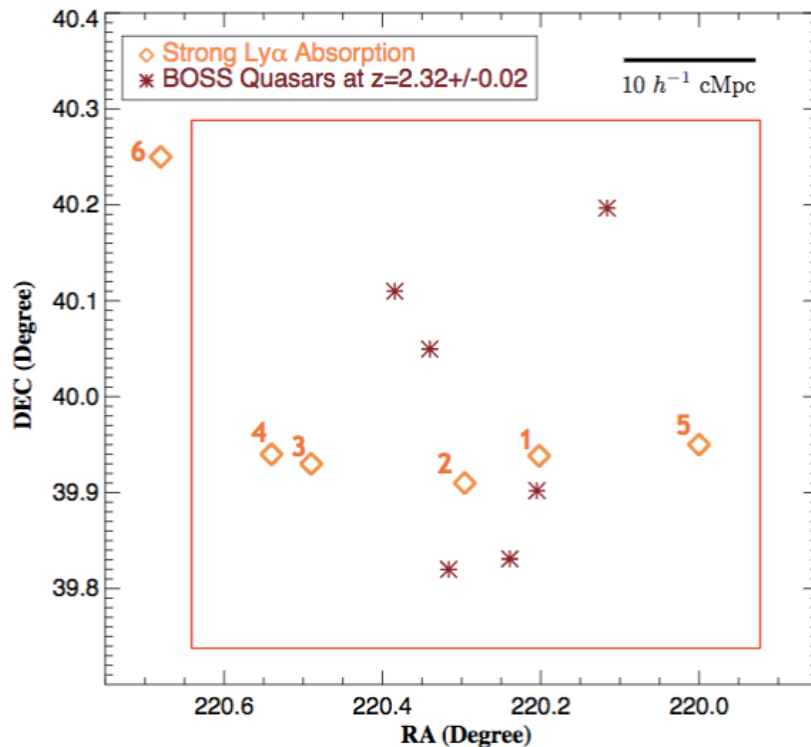
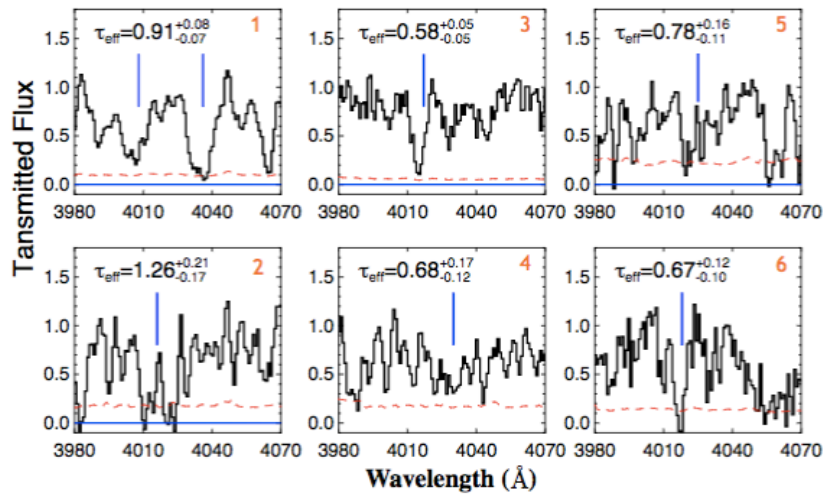
- Deep 850 $\mu$ m maps of the HSC (U)Deep Survey Fields (27 deg<sup>2</sup>, CS,UDS, ELAIS-N1,SSA22)
  - Dust and obscured SF in 1M LBGs and 10k QSOs at  $z \sim 4-7$
  - Coevolution of galaxies and SMBHs L<sub>UV</sub>-L<sub>FIR</sub>
  - 1k bright SMGs

# Ideas for Large Programs (3)

## **SCUBA2 850um Maps of distant massive overdensities**

1. Abundance of SMGs in the most massive overdensities and surrounding structures  $z=2-3$ : enhanced or suppressed?
2. A complete census of star formation in proto-clusters: Ha/UV-traced vs submm-traced
3. Location of SMGs in the extreme environments: dense regions or outskirts? SF-Density relation
4. Connections between SMGs, Ha emitters and quasars?
5. Links between SMGs and Ly $\alpha$  absorption systems and Ly $\alpha$  blobs

# The 1<sup>st</sup> MAMMOTH BOSS1441 at $z=2.32$



Cai et al. (2017, arXiv:1609.02913)

# More Ideas for Discussion (4)

- 450/850um map of Herschel+Planck detected proto-clusters ?
- Rare objects/Targets
- Target fields of particular interests
- .....