

# Guest Observer/Investigator discussion

## **Participants:**

### **WFIRST:**

James Rhodes, Brant Robertson, Raja Guhathakurta

### **Japan (in random order):**

Toru Yamada, Masayuki Akiyama, John Silverman, Tadayuki Kodama, Masami Ouchi, Tohru Nagao, Yusei Koyama, Yu'ichi Harikane, Miftahul Hilmi, Masayuki Tanaka

## **Executive Summary:**

We had useful brain-storming discussions. No concrete outcomes, but we got to know each other, shared ideas, and agreed that it is important to continue the discussion.

## WFIRST-Subaru synergy:

- Should ideally be based on the main WFIRST survey.
  - Add complimentary data from Subaru;
    - complementary can be extending wavelength coverage, gaining depth, and increasing wavelength resolution, etc.
  - LSST is the first choice for the broad-band photometry
  - Narrow-band imaging from HSC may be useful
  - K-band imaging with ULTIMATE? Spectroscopy is better?
- 
- Many people are interested in PFS
  - Higher resolution and wider wavelength coverage than WFIRST
  - Not all the program can use all the fibers. Can we share fibers with multiple programs?

## Target Fields:

- Need good visibility from WFIRST
- NEP is one option, but there is not much heritage from HSC+PFS
- XMM-LSS ? It is a D/UD field in HSC-SSP. To be observed with PFS-SSP. LSST Deep Drilling Field ( $\sim 28.5$ AB), too.
- Any other fields? Extend the area around XMM-LSS?

## Science :

- X-corr between galaxies and HI (SKA)
- PFS follow-up of objects from WFIRST grism
- Ly alpha fraction among LBGs
- PFS follow-up of  $z > 7$  QSO candidates (HLS)
- etc, etc, etc...

## **How to use the 100 nights:**

- Big science often merges from the area where people cannot even imagine before launch.
- Can we reserve, e.g., 25 nights for GO to be awarded later?
- Preparatory observations with Subaru? The current Subaru-Keck framework may work.
- 20-30 nights are not a lot of nights!

## **Misc :**

- WFIRST community may benefit from Subaru experience with HSC+PFS pipeline processing and data handling.