# Report of the parallel session Time-Domain Science

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CA:
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CA:

CN:

KR:

TW:

### <<Discussion items>>

#### 1. Collaboration

- \*Define some model cases of collaborations (both science and instrumentation)
- \*How do we organize medium-to-large class programs other than SSPs? Or do we just follow the current open-use scheme?

#### 2. Feedback to Subaru

- \*Feedback to Subaru instrumentation and operation from scientific perspectives?
- \*How do we deal with ToO programs?

### 3. Promotion of partnership

- \*Improve awareness of the Subaru partnership in the communities
- \*Launch science/instrumentation working group in each category for further discussion/contact/mini-workshop?

### 1. Collaboration

## \*Define some model cases of collaborations (both science and instrumentation)

\*How do we organize medium-to-large class programs other than SSPs? Or do we just follow the current open-use scheme?

# On-going

- HSC-SSP transient survey (JP) => Keck follow-up (AU)
- SUPERB fast radio burst (AU) => Subaru follow-up (JP)

## Near future

Simultaneous high-cadence survey
 with multi-wavelength facilities
 ex: DWF (Deeper, Wider, Faster) + Subaru/HSC

# Deeper, Wider, Faster + Subaru/HSC

- JP => AU
  - Subaru/HSC
  - Expertise in realtime reduction of HSC data
  - 1m Kiso wide-field fast CMOS camera (0.5 sec, Tomo-e)
- AU => JP
  - Many radio telescopes, AAOmega spectrograph
  - Expertise of fast reduction, computer resources
- Joint proposal

\* how do we count "Australian time"??

### 2. Feedback to Subaru

- \*Feedback to Subaru instrumentation and operation from scientific perspectives?
- \*How do we deal with ToO programs?

# Operation

- Cadence observations in queue mode
- ToO
  - Many of "time-domain" science are not necessarily ToO-type
  - ToO: GW, nu, FRB, GRB==> inter-partner ToO (needs collaboration)

### 3. Promotion of partnership

- \*Improve awareness of the Subaru partnership in the communities
- \*Launch science/instrumentation working group in each category for further discussion/contact/mini-workshop?
  - Already exists (AU-JP)
    - On-going collaboration
    - Discussion of joint proposals
    - Collaboration on technical challenges
       (fast data transfer, realtime data reduction, ...)
  - CA, CN, KR, TW?
    - Please bring the outcomes of this workshop back to your countries