

# Summary of the 18th F2F@ Tokyo Tech

## 1 iKAGRA phase-1 operation

- Installation, integration and commissioning are on schedule. “well done”
- Phase-1 operation will start in April 2018, and will finish no later than the end of May 6.
- Phase-2 starts on May 7.
- Write a full author paper at the end of phase-1 as a milestone of our achievements. (Details would be supposed to be prepared as separate papers by each subgroup).
- KSC boards will collect comments on the plans for the paper, and decide the **paper-writing team** by the end of Jan 2018. The paper-writing team will provide baselines on deciding the content of paper, target journal, etc.
- In order to accelerate the editing procedure, the board proposes to use wiki (closed within collaboration) for collecting comments.

# Summary of this F2F (2)

## 2 Roadmap to phase-2/3

Join to LIGO/Virgo O3 run ? (2018-2019, at least its late phase)

### Joining LIGO/Virgo-O3 or not

#### Scientific Viewpoint

- Confirmation the observation is hard with a single detector unless the signal is large enough
- Showing our “fundamental direction” to GW networks is important.
- The earlier, the better for negotiation & preparation.

➔ Data management groups say “YES”

#### Installation/Commissioning Viewpoint

- tight schedule, “death march”

➔ Check the steps and conclude soon

If there are no objections, we would like to set these comments as a conclusion of this F2F.

➔ ➔ We will back this point tomorrow.

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# Summary of this F2F (3)

## 3 Establishing Theory/Multi-messenger groups under KSC

### Main Tasks: Theory (or Theoretical Astrophysics) group

- (a) contribute to analysis (interpretations, alternative possibilities, ...)  
観測データに対する解釈・可能性の議論
- (b) suggestions to new scientific projects of KAGRA  
KAGRAを用いた新たな科学的成果獲得への具体的な提言
- (c) feasibility discussions of KAGRA future plans  
KAGRA将来計画についての実験側・解析側との意見交換
- (d) promote gravitational wave physics  
重力波物理学の推進

### Main Tasks: Multi-Messenger (or Obs. Astronomy) group

- (a) maintain the alert system  
アラート体制の確立・維持
- (b) connections to observational groups  
天文観測グループとの情報共有
- (c) feasibility discussions of KAGRA future plans  
KAGRA将来計画についての実験側・解析側との意見交換
- (d) promote multi-messenger science  
マルチメッセンジャー科学の推進

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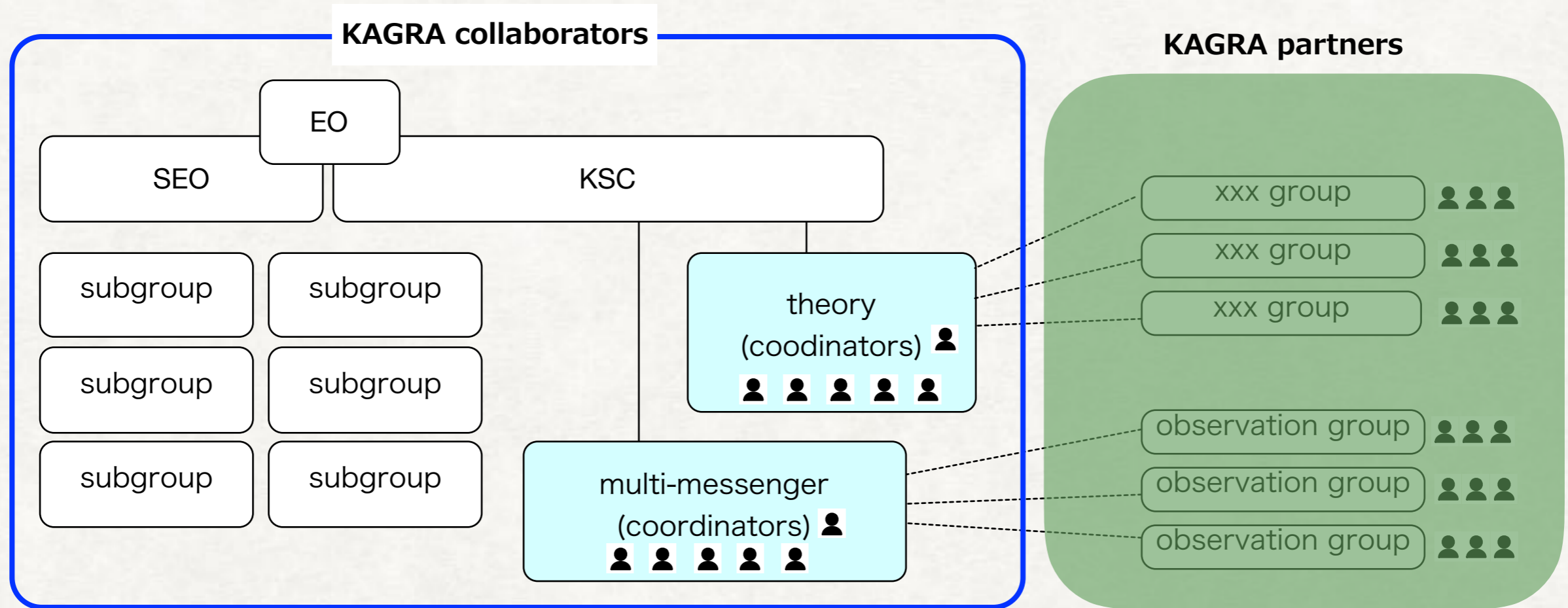
**Basic idea is accepted. Worth trying to start.**

**( Note that we received a comment, "we do not need a theory group".)**

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# Summary of this F2F (4)

## 3 Establishing Theory/Multi-messenger groups under KSC (cont.)



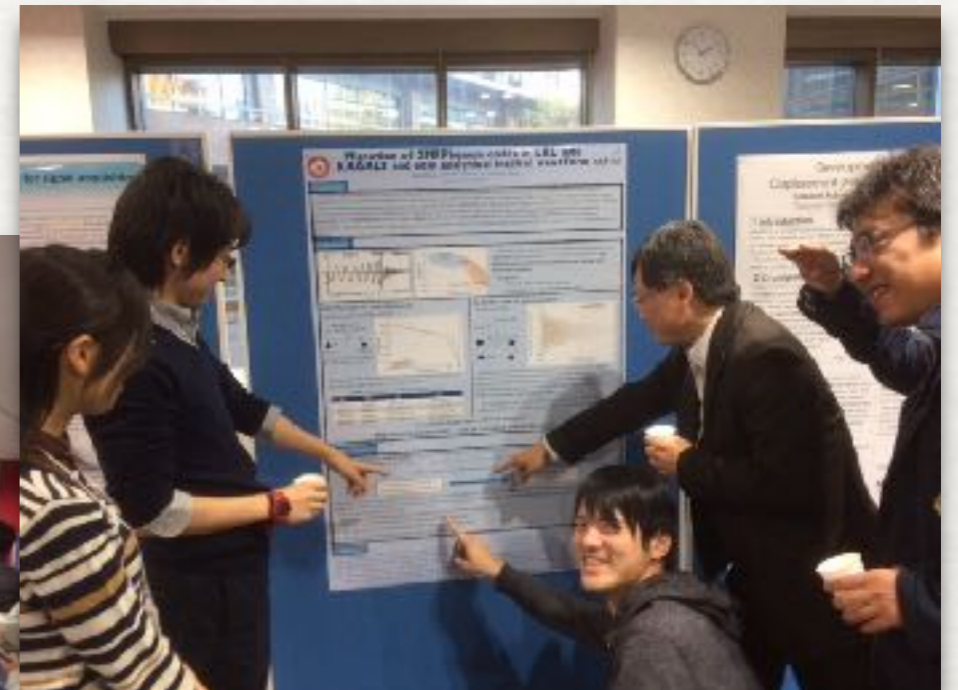
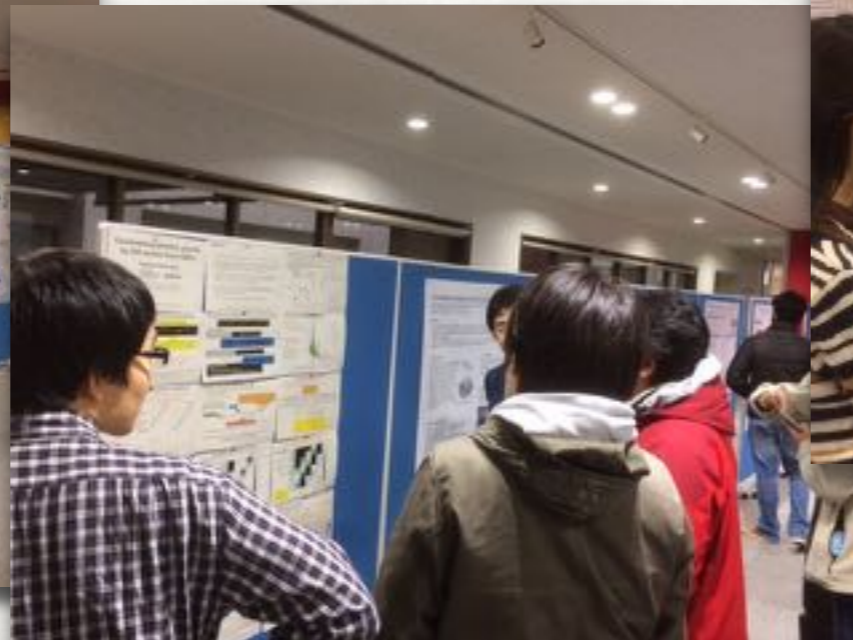
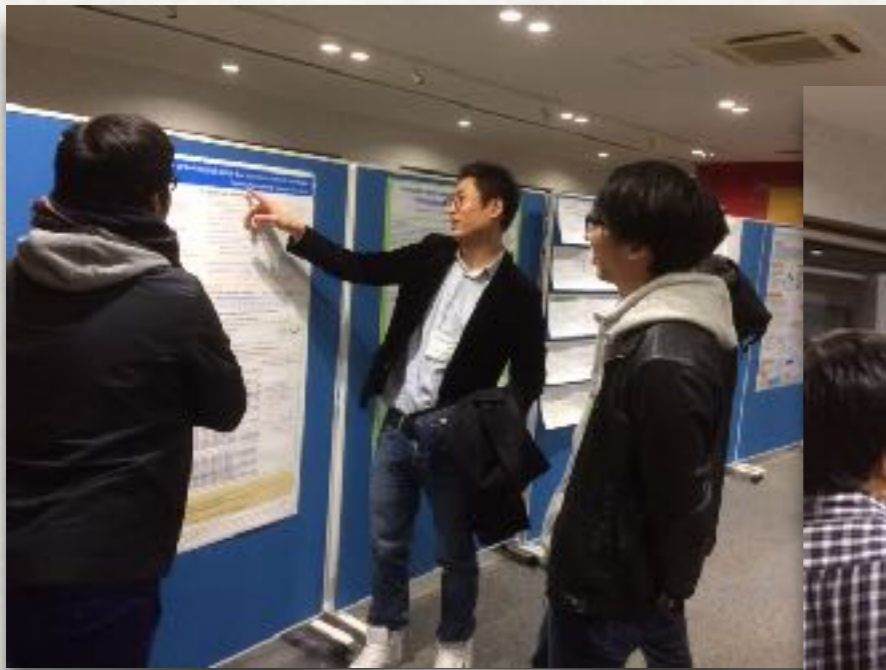
Need to clarify the definition of KAGRA partners. => Next F2F

Start calling members who are interested in joining to new group within us.

# Summary of this F2F (5)

## 4 Poster Session

- Originally planned for thesis session. But many younger researchers made presentations, than we expected.
- The session helps to promote our researches, to provide a chance of presentation, to know each other, .
- Young researchers' group proposes to hold this style at F2F, and also proposes to set "the award".



# Summary of this F2F (6)

## 5 Two invited talks

- New Innovative area  
Gravitational wave physics and astronomy: Genesis (PI: Takahiro Tanaka)
- Grant-in-Aid for Scientific Research (S)  
Calibration Standard and High-Precision Data Analysis toward the  
Observational Era of Gravitational Waves (PI: Nobuyuki Kanda)

## 6 New Member/New group

- Wenbiao Han, Shanghai Astronomical Observatory
- Sang-Hyeon Ahn & YoungBok Bae @ KASI

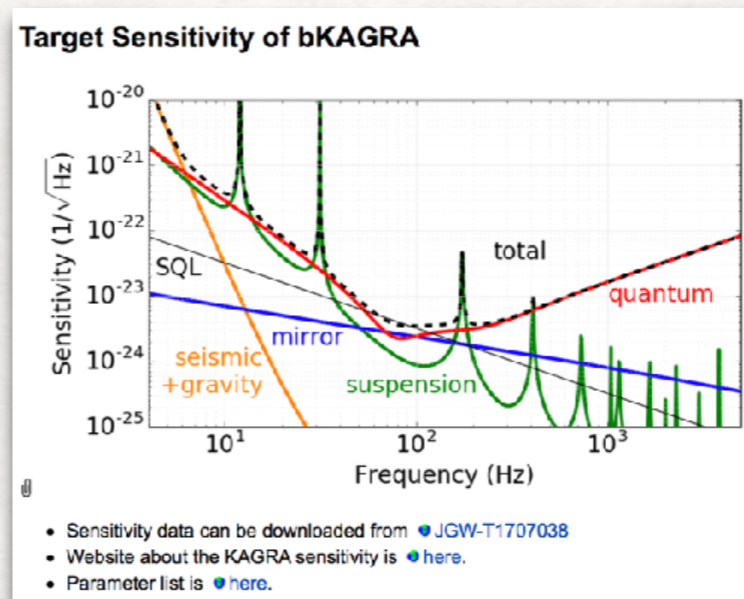
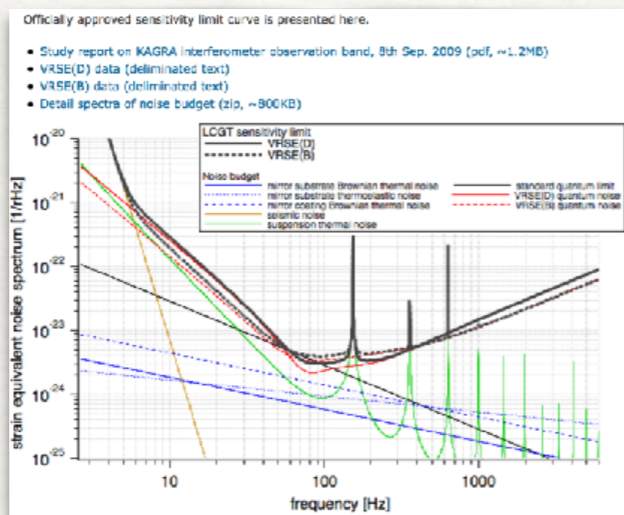
Report from KSC board (2)

☑ bKAGRA sensitivity curve : updated

<http://gwcenter.icrr.u-tokyo.ac.jp/researcher/parameters>

<http://gwcenter.icrr.u-tokyo.ac.jp/en/researcher/parameter>

<http://gwwiki.icrr.u-tokyo.ac.jp/JGWwiki/KAGRA>



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The official sensitivity curve(s) should not include the sensitivity below 10Hz.  
memo of EO meeting (Aug. 7, 2017)

➡ change the total-sensitivity line below 10 Hz to a dotted line.  
add in the web: "KAGRA is designed to use data in observations above 10 Hz."

# List of requests to you (1)

## Commissioning (Miyakawa)

If you conduct a commission, join to the commissioning mailing list, [gokagra](#).

[JGW-G1707493: KAGRA commissioning work](#)

Start a bug report system, [Bugzilla](#).

[JGW-G1707499: DGS and AEL status](#)

## Diversity Committee (Kokeyama)

If you plan to join the activities, contact one of the committee members.

K. Kokeyama (ICRR) [chair], H. Shinkai (ICRR), C. Kim (KASI), J. M. Fedrow (Kyoto U.)

K. Sakai (Nagaoka U. Tech.)

[JGW-G1707505: Activity report from the KSC diversity committee](#)

## Proposal of Poster Awards & Travel support for young researchers (Inoue)

Comments welcome to [kscpostdoc@icrr.u-tokyo.ac.jp](mailto:kscpostdoc@icrr.u-tokyo.ac.jp), [kscstudent@icrr.u-tokyo.ac.jp](mailto:kscstudent@icrr.u-tokyo.ac.jp)

[JGW-G1707504: KSC\\_poster\\_Session](#)



# List of requests to you (2)

## Updating DetChar tools (Hayama)

Python programmer wanted.

[JGW-G1707517: DET status at F2F meeting at Titech, 2017](#)

## How to lower the barriers for working at the Kamioka site (Aso)

Comments, proposals, & ideas to Aso-san.

[JGW-G1707503: How to lower the barrier for site works](#)

# List of requests to you (3)

To be mailed soon the details with the following deadlines

**a** by Dec 31 : **Phase-1 paper writer** volunteers

JGW-M1707473: Review of the iKAGRA Paper Writing Process

**b** by Dec 31 : calling **new subgroup (network)** members  
(Theory or Multi-messenger) from KAGRA collaborators

JGW-G1707466: Establishing Theory/Multi-messenger groups

**c** **KSC member** check

JGW-M1706134: KSC member list

JGW-M1504017: Society Regulations of KAGRA Scientific Congress

(1) One congress member from each institute

(2) In addition to the above rule, one congress member per 4  
KAGRA collaborators in each institute.

# Our Next Schedule

**April-May 2018:            bKAGRA phase-1 operation**

**May 18(Fri)-20(Sun):**

**19th Face-to-Face meeting @ Osaka City University**

**June 29(Fri)-30(Sat):**

**4th KAGRA International Workshop @ KASI, Daejeon, Korea**

**KSC board accepts proposals for satellite meeting on June 28 or July 1**

**Late August:**

**20th Face-to-Face meeting @ Toyama University**

**Many thanks to**

**LOC, Somiya-san & Tokyo Tech members for hosting this F2F**

**Talkers, Poster presenters**