

Subaru 3

Tomoki Morokuma on behalf of Subaru 3 WG / Subaru SAC
Astronomy Research Center (ARC), Chiba Institute of Technology

Subaru 3 WG members: M. Oguri (Chiba U.), Y. Koyama (NAOJ), M. Ishigaki (NAOJ), M. Kubo (Kwansei Gakuin U.), B. Sato (Science Tokyo), T. Morokuma (Chiba Institute of Technology)

Towards Subaru 2 (around 2010)

= 光赤外専門委員会への提言 =

2020 年へのすばるの戦略 “天・地・人”

～スペースと地上観測の連携そして人材育成を軸に～

2009 年 3 月 9 日

すばる小委員会

= ハワイ観測所への提言 =

2020 年代に向けたすばるの戦略

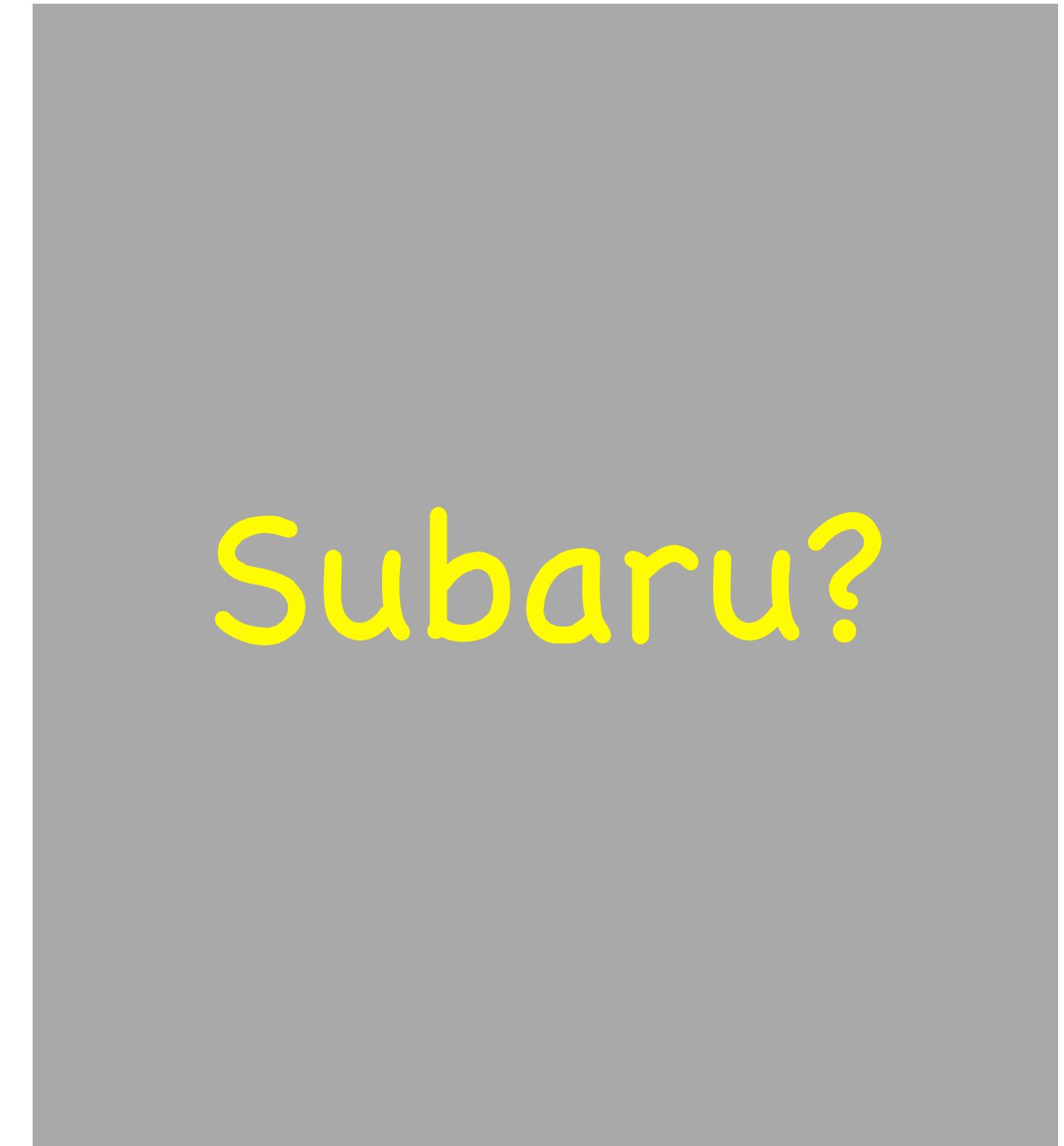
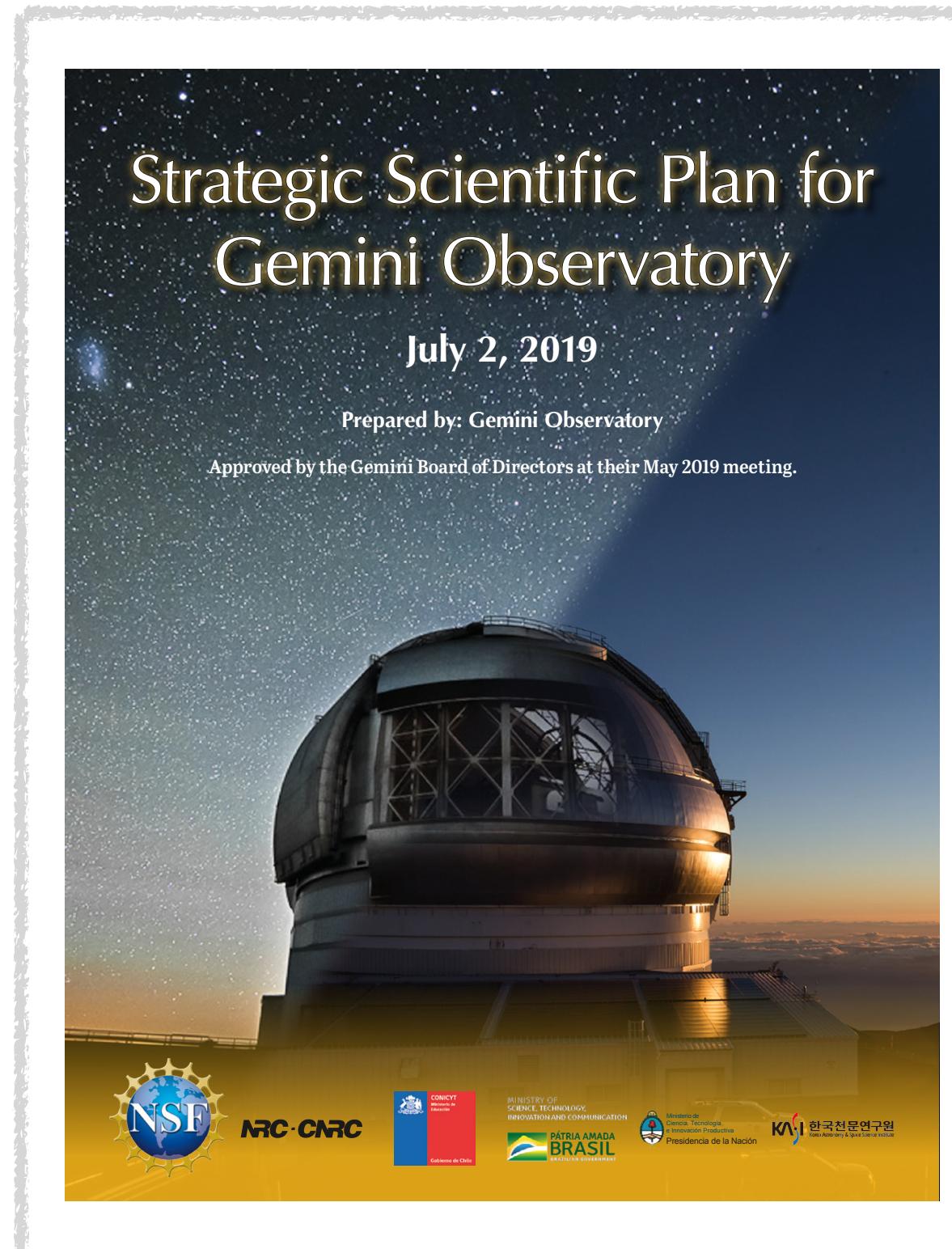
～次世代地上・スペース望遠鏡を見据えた運用と人材育成～

2012 年 6 月 30 日

すばる小委員会

Subaru 3 (booklet)

- Subaru 2 (now)
- Workshop (August 2024) + Discussion in Subaru UM FY2024 (Jan 2025)
- Other observatories (incl. Keck, Gemini) issued 30-40-page books for their future.
- Anybody welcome to join the subWGs (see [gopira:02354])
 - Exoplanets, Nearby galaxies, Galaxy evolution, Cosmology, MMA, **Milky Way**



目的 / Purposes

- すばる3時代に向けた科学的展望を明示し、外部への説明資料および内部の交通整理資料として活用
Clearly present the scientific vision in the Subaru 3 era, and utilize it both as material for external communication and as an internal reference document.
- 以下の読者を想定する: 国内外の天文学コミュニティ (光赤外以外も含む)、他分野の研究者、政策決定・予算措置に関わる方々、一般の方々
Intended audience includes: astronomical community (not limited to optical and infrared fields), researchers in other disciplines, policymakers and funding authorities, and the general public.

構成案 / Booklet Structure (draft)

- すばる3時代におけるサイエンスの展望 (キーサイエンス+その他)
Scientific vision in the Subaru 3 era (emphasis on key sciences)
- マウナケアを取り巻く状況・環境 / Current situation/environment surrounding Maunakea
- 望遠鏡の運用方針 など / Telescope operation policies, etc. Comments in Subaru UM FY2024
 - Relationship w/ local community
 - Sustainable operation model

subWGの構成 / Current Structure of subWGs

- サイエンス分野ごとに1つずつ設置 (計6分野):
系外惑星、近傍銀河、銀河進化、宇宙論、マルチメッセンジャー、銀河系内 (新設)
One subWG for one science field (6 subWGs in total):
exoplanets, nearby galaxies, galaxy evolution, cosmology, and multi-messenger
+ Milky Way (very recently launched)
- 今後、必要に応じて新たなsubWGの追加や統合も検討します
SubWGs may be newly created or merged in the future as needed.
- 複数分野に共通する観測装置や運用議論用のsubWGも別途設置予定
Separate subWGs will also be set up for discussions on observational instruments
and telescope operations that are shared across multiple science fields.

subWGに期待される役割 / Expected Roles of subWGs

□ すばる3時代に実現したいサイエンス目標の明確化

Clarify the scientific goals to be achieved in the Subaru-3 era.

□ 必要な観測計画・装置仕様・望遠鏡機能・運用形態の整理(可能な限り具体的に)

Identify the required observation programs, instrument specifications, telescope capabilities, and operational frameworks – as concretely as possible.

□ 関連サイエンスを1つまたは少数のパッケージとして提案

Propose relevant science cases as one or a few integrated packages.

□ 既存の枠組での実施が難しい場合は、その理由を明確化

If implementation within existing frameworks is difficult, clearly state the reasons.

□ 他望遠鏡の状況を踏まえた上で、すばるで行うべき正当性を明確化

Justify why the science should be conducted with Subaru, considering the situation of other observatories.

□ TMT等の他望遠鏡との連携を前提とする場合は、その点を具体的に明確化

If coordination with other facilities such as TMT is anticipated, specify this clearly and concretely.

□ すばるSACやWGでの議論においてキーサイエンス・ブックレット構成が確定した後、所定の分量の原稿を執筆・提供

After the key science topics and booklet structure are finalized through discussions within the Subaru SAC and WGs, prepare and submit the assigned section(s) of the manuscript.

Timeline

- Sep/Oct 2025: Call for subWG members ==> started discussion
- Oct 2025 (Now): Subaru 3 Discussion @ Subaru UM FY2025
- FY2025: Subaru 3 WS #2 (Feb or March in 2026?)
- FY2026: Subaru 3 WS #3, Writing & Editing
- 2027-2028 (before mid-term review for Subaru 2): Subaru 3 Booklet Issued

Please join the subWG(s) !!!

By filling in the form: <https://forms.gle/bJdBxEmY69CHPuv17>
or contacting the Subaru 3 WG members.