

# PERSONAL PROSPECT FOR NOBEYAMA RADIO OBSERVATORY

**Ken Tatematsu** (Nobeyama)

Mt. Yatsugatake & 45 m telescope





2018.8

- Univ. of Manchester
- Jodrell Bank Observatory
- 76 m telescope (built in 1957)
- with Prof. Gary Fuller
- World Heritage (2019)

- I was extremely impressed by the way that the Jodrell Bank Observatory is doing
  - **refurbishment of the main dish** (money from SKA, HQ of SKA!)
  - **kids' science programs** (25% ? income)
  - summer **rock music concert** with project mapping illumination (50% income)
  - **First Light Pavillion visitors centre** ￡20M ~ 30億円
- I wish to do something for Nobeyama --- how to earn
  - **charged** telescope time
  - **paid** guided tour, **commercial** filming, **paid** astro-photography event, observatory souvenir



# 2018.8 CAFETERIA





## THE FIRST LIGHT PAVILION

The **First Light Project** represents a £20.5m investment in to Jodrell Bank Discovery Centre and will transform the site into a world-class visitor attraction. It will allow us to open our doors to thousands more visitors and school children, providing an inspirational space in which to deliver workshops and outreach sessions, giving more people the chance to reach their potential.

The centrepiece of the project will be the **First Light Pavilion**, a stunning new building constructed in the gardens of Jodrell Bank. The Pavilion, designed by the internationally acclaimed architects HASSELL Studio, will include a gallery dedicated to telling the story of Jodrell Bank, an immersive projection space and auditorium, and a new education hub and cafe.



Artist's Impression of the First Light Pavilion  
HASSELL

Inside the First Light Pavilion will be a spectacular exhibition in which visitors can engage with the stories of the amazing scientists and engineers who have worked at Jodrell Bank over the years, and whose stories continue today.

This magical new gallery will include interactive displays, objects and artefacts from the site's rich history and will make innovative use of fragments of the original 1957 surface of the Lovell Telescope. Archive footage and large-scale projections will animate the exhibition and bring the past to life.



A beautiful auditorium will also feature, housing an immersive projection space where visitors will be able to watch an animated history of Jodrell Bank. The auditorium will also serve as a unique new venue for events, evening lectures, recitals, planetarium shows, workshops, and plenty more.

Above: Exhibition design by Casson Mann  
Below: Artist's Impression of the auditorium and immersive projection space

2018.8

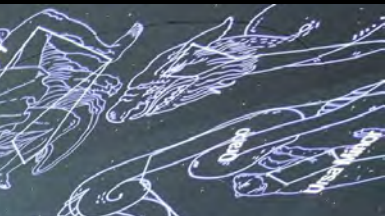
- 30億円の visitor center under construction

# FIRST LIGHT PAVILION COMPLETE (2022)



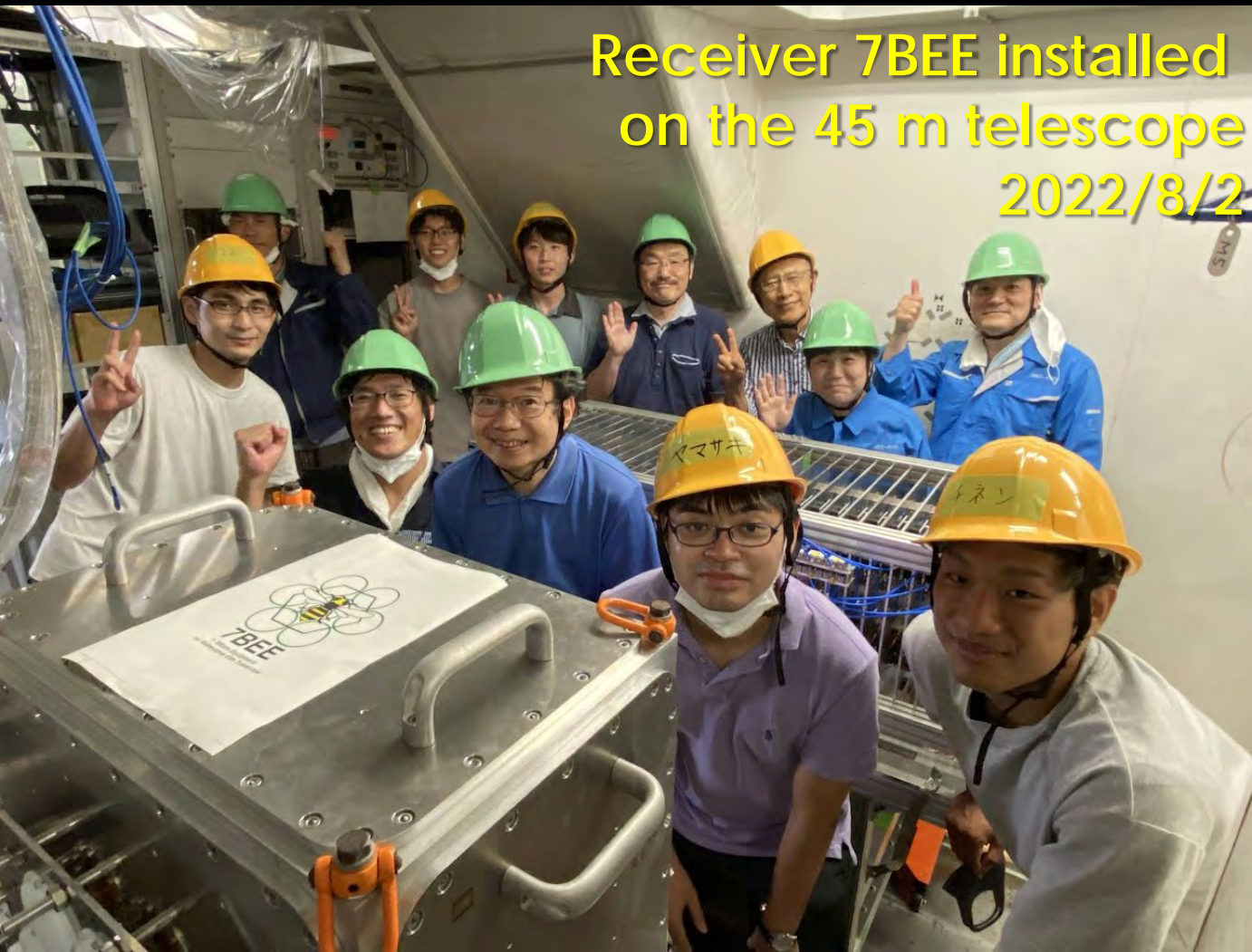


# FIRST LIGHT PAVILION





# UNIV. MANCHESTER: CUTTING-EDGE TECHNOLOGY AND HISTORY



- U. Manchester develops the world's best InP HEMP amplifiers for 67-116 GHz.
- We originally planned to get them for our receiver 7BEE from Gary Fuller, but Manchester lab got closed due to the pandemic.
- Instead, we bought them from Low Noise Factory.

## PERSONAL VIEW

- Europe has a long cultural history. They are much **proud of their culture**, AND **invest enough money** in culture and education, although their economy is not very good.
- This might be in contrast with a simple “scrap and build” way, which is popular in US and Japan.
- Probably, we may do something similar at Nobeyama Radio Observatory, in parallel to active operation of the 45 m telescope.



- END

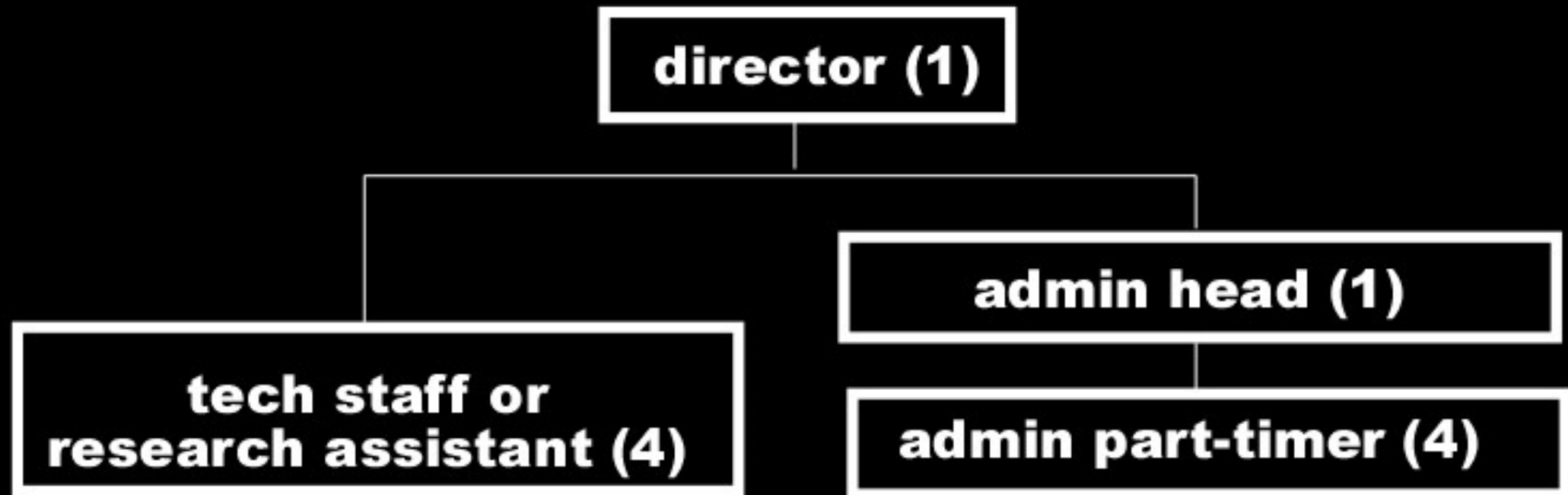


# DISCUSSION POINTS

# BACKGROUND INFO

- K. Tatematsu
  - will retire in 2025 March (16 more months)
  - term of Director: till 2024 September (10 more months)
- Job opening for Professor or Associate Professor
  - under selection
  - the person will become only one astronomer at Nobeyama

# ORGANIZATION CHART FOR 2028-2033 PRESENTED AT NAOJ FUTURE SYMPOSIUM



# DISCUSSION POINTS

- **Charged telescope time**: Are you happy? Suggestions for improvement?
- Nobeyama **Development Program**: may depend on new director. It apparently needs technical expertise.
- Hands-on Tutorials
  - So far, we have accepted **3-4 charged University-led** Hands-on Tutorials **a year**
  - At least, in FY2024, we resume **free-of-charge undergraduate** Hands-on Tutorial.
  - At least, in FY2024, we offer three slots of **free-of-charge University-led** Hands-on Tutorials, **in addition to** normal **charged University-led** Hands-on Tutorials
  - Let us discuss for plans FY2025-. Of course, the basic idea is to continue them, but can the observatory do them? Again, may depend on new director.
- Any suggestions for **the future**? What is the shape of Nobeyama you wish, **if you still think that Nobeyama should continue its operation**.