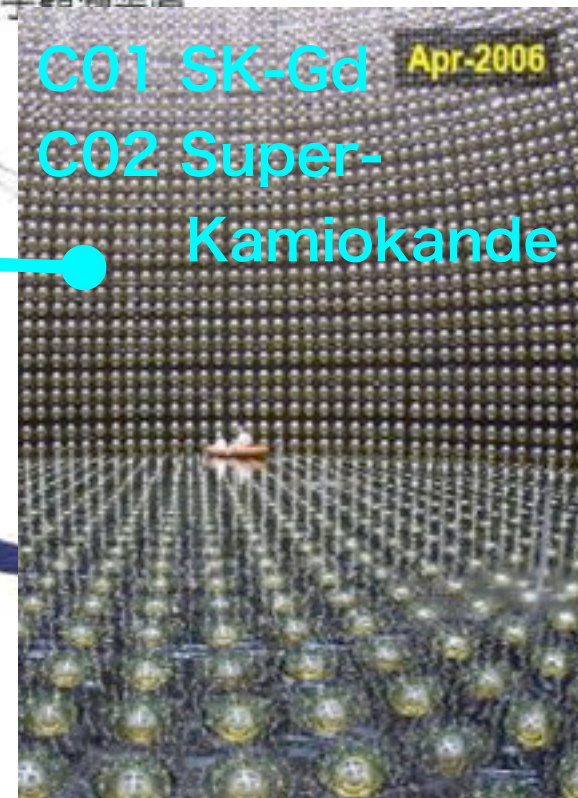
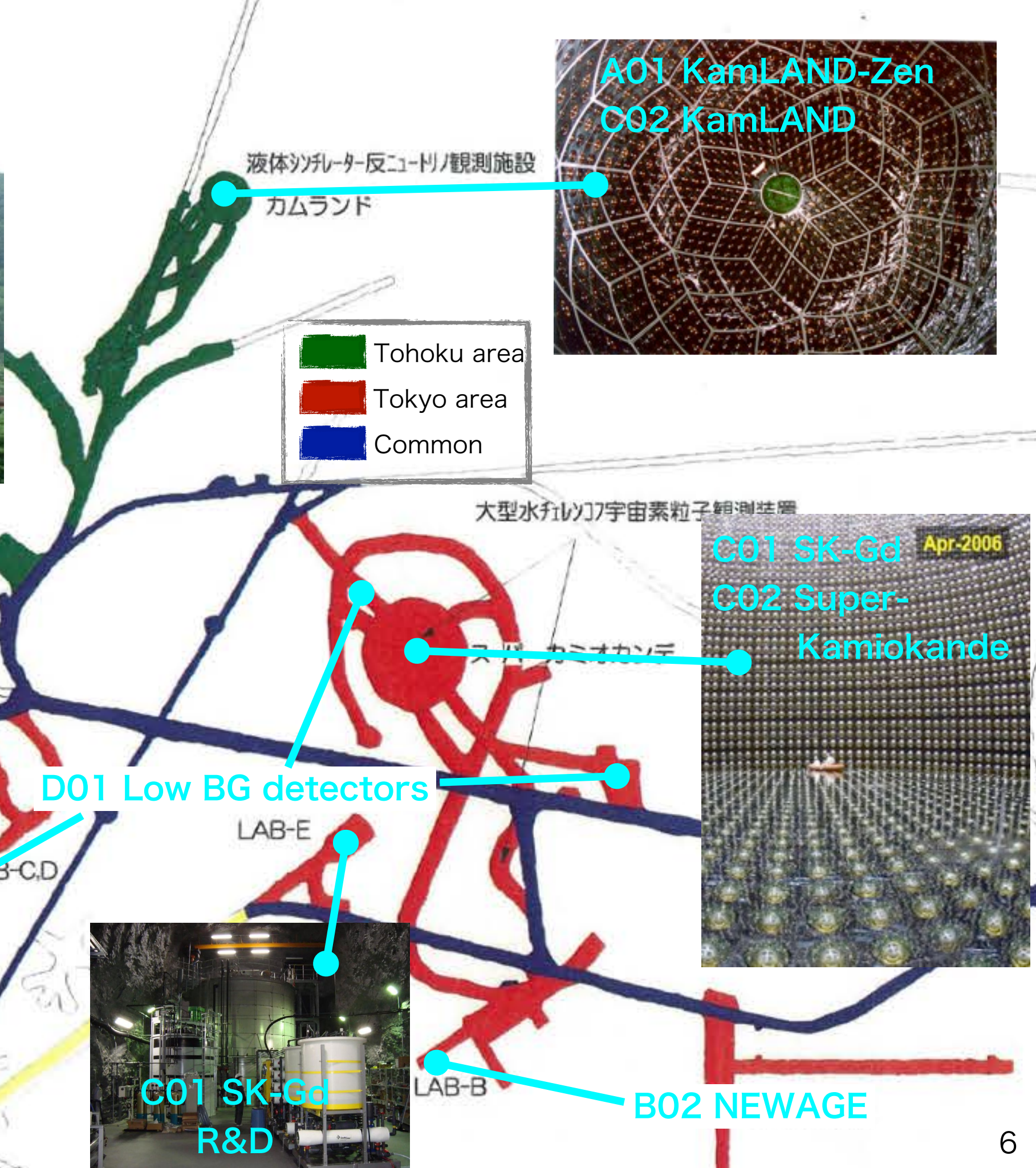


Welcome

to the international symposium;
“Revealing the history of the
universe with **underground**
particle and nuclear
research 2016”

Organized by “New innovative area: Revealing the
history of the universe with underground particle and
nuclear research” FY2014-2018

Underground experiments



D01 Low BG detectors



B02 NEWAGE

Seeking the possibility of collaboration

to sustain the forefront role longer term thus to expect the first discoveries,
to gather and develop various knowhow without duplications

DBD workshop/talk-in 2010.12.17-18, 65 participants

propelling to mature the community and forming the consensus of future prospects

Ultra-low BG workshop/talk-in 2013.4.23-24, 80 participants

Efficient cooperation among researchers sharing technological requirements

Discussion concerning the formation of a kind of consortium

We applied “new innovative area” and funded

1,122,800 KYen (planned project)

+ 100,000 KYen (invited project)

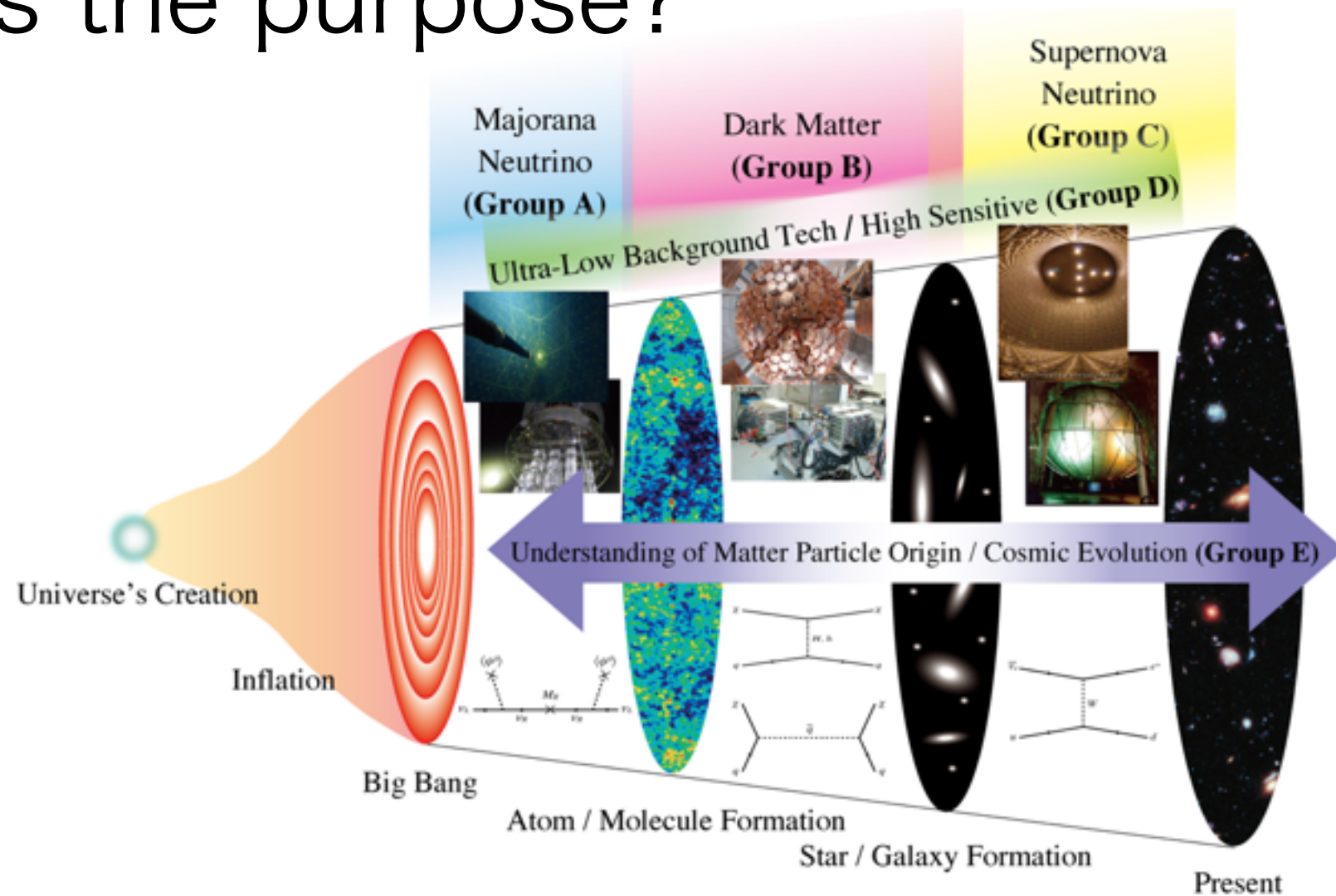
+ 47,300 KYen (international activity)

1st workshop, 2014.8.23-24 134 participants

2nd workshop, 2015.5.15-17 113 participants

This is the third

What is the purpose?



Why weren't the same amount of particles and anti-particles created?

What is dark matter essential for the structure formation but not in the standard theory?

What is the supernova history and their explosion mechanism?

What energy drives the sun and the Earth?

Why neutrinos are so light?

This new innovative area challenges these questions in the **ultra-low radioactivity** environment, and aims at forming the unified particle theory and cosmological understanding.

- A: DBD (KamLAND-Zen/CANDLES/3 invited)
- B: Dark Matter (XMASS/directional/2 invited)
- C: SN relic/burst neutrino (SK-Gd/network/1 invited)
- D: Ultra-low BG technique (1 planned/3 invited)
- E: Theory (1 planned/3 invited)

Please enjoy the discussion
&

Let's activate the area!!

underground particle
& nuclear research