GWIC
Gravitational Wave International Committee

Date: June 12th, 2018

Prof. Takaaki Kajita
Director, Institute for Cosmic Ray Research,
The University of Tokyo

Dear Prof Kajita

On behalf of the Gravitational Wave International Committee (GWIC)[*], I am writing to express our strong support for the application of the Institute for Cosmic Ray Research (ICRR) to be considered as an "International Joint Usage / Research Center". In particular this would facilitate the ability of the international gravitational wave (GW) community to work with scientists at ICRR and elsewhere in Japan associated with the KAGRA gravitational wave detector – a key part of the growing international network of GW observatories.

The detection of gravitational waves from the collisions of pairs of black holes by the LIGO detectors, and more recently in co-ordination with the Virgo detector in Italy, made world-wide headlines both in scientific circles and in the popular press. Gravitational wave observations hold the potential to revolutionize our understanding of the universe.

There is an urgent scientific need for another detector of comparable sensitivity located in the other longitudinal hemisphere to extend the international network. Although LIGO alone was able to first securely confirm that a burst of gravitational waves had struck the earth, without the needed international partners it was limited in what it could measure about the sources of the waves. The addition of the Virgo detector to the international network in 2017 was key in enabling identification of the host galaxy and fuller exploitation of the first detection of a binary neutron star collision, with spectacular initial scientific results, but even with Virgo many parts of the sky are poorly covered. Maximising exploitation of the gravitational waves requires a fourth detector operating in coincidence with LIGO and Virgo.

The Japanese KAGRA project, currently undergoing commissioning at the Kamioka site, is the only detector that can fill this role within the next few years. KAGRA will have a very important role in the growing international network of gravitational wave observatories. Thus the international GW community is very keen to work with ICRR and other Japanese scientists associated with KAGRA. On behalf of GWIC I am delighted to express strong support for ICRR's application for recognition as an "International Joint Usage / Research Center".

Sincerely,

Sheila Rowan
GWIC Chair

[*] GWIC was formed in 1997 to facilitate international collaboration and cooperation in the construction, operation and use of the major gravitational-wave detection facilities world-wide. It is affiliated with the International Union of Pure and Applied Physics as Working Group 11.

The **Gravitational Wave International Committee** (GWIC: http://gwic.gravity.psu.edu) is composed of the leaders from the large gravitational wave detector worldwide.

Current member projects and representatives on GWIC include:

Ozgrav
- Matthew Bailes, Swinburne University (PPTA)
- David McClelland, ANU, (Audioband)

Einstein Telescope
- Michele Punturo, INFN-Perugia

European Pulsar Timing Array (EPTA)
- Michael Kramer, Max-Planck-Institut für Radioastronomie and Jodrell Bank Centre for Astrophysics (University of Manchester)

GEO 600
- Karsten Danzmann, Albert-Einstein-Institut fur Gravitationsphysik and University of Hannover
- Sheila Rowan, University of Glasgow, **Chair**

IndIGO
- Bala Iyer, International Centre for Theoretical Sciences
- Somak Raychaudhury, Inter-University Centre for Astronomy and Astrophysics,

KAGRA
- Yoshio Saito, KEK
- Takaaki Kajita, Institute for Cosmic Ray Research, University of Tokyo

LIGO
- Dave Reitze, California Institute of Technology and University of Florida
- David Shoemaker, Massachusetts Institute of Technology

LISA Community
- Neil Cornish, Montana State University
- Bernard Schutz, Albert-Einstein-Institut fur Gravitationsphysik and Cardiff University
- Ira Thorpe, Goddard Space Flight Center
- Stefano Vitale, University of Trento

NANOGrav
- Maura McLaughlin, West Virginia University,

Spherical Acoustic Detectors
- Odylio D. Aguiar, Instituto Nacional de Pesquisas Espaciais

Virgo
- Fulvio Ricci, University of Rome, "La Sapienza"
- Jo van den Brand, Dutch National Institute for Subatomic Physics (Nikhef) and VU University in Amsterdam

Theory Community
- Clifford Will, University of Florida

IUPAP Affiliate Commission AC2 (International Society on General Relativity and Gravitation)
- Beverly Berger, ISGRG Secretary

IAU Commission on Gravitational Wave Astrophysics
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