

Rome,

July 30, 2014

Prof. Dr. Johanna Wanka Federal Minister of Education and Research Bundesministerium für Bildung und Forschung Hannoversche Straße 28-30 10115 Berlin, Germany

### Excellency:

On behalf of the Gravitational Wave International Committee (GWIC)\*, I am writing to express our deep concern about your ministry's intention to withdraw from the "Square Kilometre Array" (SKA) project.

SKA is one of the flagships in the field of multi-messenger astronomy, not only as the world's foremost imaging and surveying radio telescope, but also an instrument with applications that go far beyond the classical usage as a radio observatory. The SKA will transform the study of gravitational waves at low frequencies. Although detection of low frequency gravitational waves through pulsar timing may be possible with current radio telescopes, the SKA will bring qualitatively new capabilities and increase the discovery potential enormously.

As a result, SKA will play an important role in gravitational wave science, complementing the capabilities of higher frequency capabilities of current ground-based interferometers like Advanced LIGO, Advanced Virgo and KAGRA, and proposed follow-on observatories such as the Einstein Telescope in Europe. In addition, SKA may be able to detect sources to be studied by ESA's eLISA mission and provide complementary observations earlier in their evolution.

Given the importance and versatility of the SKA as a tool for astrophysics and fundamental physics, we urge you to reconsider this decision. Germany is an important global leader in gravitational wave research across the full spectrum, and we hope that our German colleagues will continue to be able to contribute to SKA development and to access the telescope for this exciting science.

Sincerely,

Eugenio Coccia GWIC Chair

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\* GWIC was formed in 1997 to facilitate international collaboration and cooperation in the construction, operation and use of the major gravitational-wave detection facilities worldwide. It is affiliated with the International Union of Pure and Applied Physics as Working Group 11. A key GWIC goal is to promote long-range planning for the development of gravitational-wave detection, exploiting especially its potential for multi-messenger astrophysics.

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

Current member projects and representatives on GWIC include:

## **ACIGA**

• Peter Veitch, University of Adelaide

## **AURIGA**

Massimo Cerdonio, University of Padua and INFN

## **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

#### IndIGO

• Bala Iyer, Raman Research Institute

#### **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
- Gabriela Gonzalez, Louisiana State University

## **LISA Community**

- Neil Cornish, Montana State University
- Bernard Schutz, Albert-Einstein-Institut für Gravitationphysik
- Robin Stebbins, Goddard Space Flight Center
- Stefano Vitale, University of Trento

#### **NANOGrav**

• Frederick Jenet, University of Texas, Brownsville

#### **NAUTILUS**

• Eugenio Coccia, University of Rome "Tor Vergata", Chair

# Parkes Pulsar Timing Array (PPTA)

• George Hobbs, Australia Telescope National Facility (ATNF)

# **Spherical Acoustic Detectors**

• Odylio D. Aguiar, Instituto Nacional de Pesquisas Espaciais

#### Virgo

- Fulvio Ricci, University of Rome, "La Sapienza"
- Jean-Yves Vinet, Observatoire de la Côte d'Azur

## **Theory Community**

• Clifford Will, University of Florida, 2000--

# **IUPAP Affiliate Commission AC2 (International Society on General Relativity and Gravitation)**

• Beverly Berger, ISGRG Secretary

## **Executive Secretary**

• Stan Whitcomb, California Institute of Technology