## CONCEPT NOTE: BRICS ASTRONOMY WORKING GROUP MEETING AND WORKSHOP IN DURBAN ON 29-31 OCTOBER 2018

## "Ideas to take the BRICS Astronomy forward"

Brazil, Russia, India, China and South Africa (BRICS) share common aspirations for scientific and technological development, and for the growth of human capital resources. Astronomy captures the imagination of people everywhere, and touches a fundamental human desire to understand the universe that surrounds us, and our place in it. It provides an ideal way to attract young learners into scientific and technical studies, developing the human capacity for the knowledge-based economy of the future. Its appeal transcends boundaries that divide peoples and speaks to all members of our societies. The goal of the BRICS Astronomy Working Group (BAWG) is to exploit these basic strengths for the mutual betterment of our general populaces.

At the first BRICS Science, Technology and Innovation (STI) Ministerial Meeting which was held in Cape Town on 10 February 2014, five priority areas to be led by the respective BRICS member countries were endorsed. South Africa was given the responsibility to lead the astronomy priority area, and consequently chairs and provides the secretariat for the BAWG. Since then, a total of three BAWG meetings have been held, the first in Cape Town in 2015, the second in Ekaterinburg in 2016, and the most recent one in Pune in 2017. During this three years, the BAWG managed to achieve the following things:

- The Terms of Reference for the BAWG which defines the mandate, scope of work and roles and responsibilities of each party;
- The 2017-2020 BRICS Astronomy Framework for Scientific Cooperation, a document which defines the priority areas of cooperation and the modalities of engagement. The priority science areas identified include but not limited to cosmology, galaxy formation and evolution, stellar and compact object astrophysics, and big data.
- A website for the BAWG <a href="http://www.bricsastronomy.org/">http://www.bricsastronomy.org/</a>;
- Two workshops have been held, the first one on *Astronomical Data and Computation* held in Russia, and the second on *Astronomy Infrastructure and Instrumentation* held in India.
- More importantly, a networked community of astronomers and relevant government officials in science ministries has been developed and is working well together.

**The BRICS Astronomy Workshop** is held under the auspices of the BWAG and provides a platform for BRICS member countries to engage on scientific and technological discussions related to research, development and practice in astronomy, and to work on project proposals for promoting BRICS cooperation in astronomy.

The BRICS Astronomy Working Group (BAWG) is composed of government officials (or their designated representatives) supported by the focal points on astronomy and experts from BRICS member countries. The mission of the BAWG is to promote cooperation between BRICS member countries in the field of astronomy and enabling technologies, through joint activities of government, universities, research institutions, and industry, as relevant, in order to develop astronomical sciences, generate new knowledge, train human capital, develop new technologies and applications, and improve public understanding of science.

The BAWG has therefore laid a good foundation in the past three years and the challenge is now to take the cooperation to the next dimension of working together on real projects. The upcoming BAC meetings in South Africa promises to be yet another exciting event to look forward to. From the resolutions adopted at the last meeting in Pune last year, the focus of the Durban meeting will be to workshop project proposals submitted by member countries in an effort to work towards flagship projects for the consortium.

The BAWG will be held back-to-back with the BRICS Astrophysics, Gravity and Cosmology (BAGAC) Conference which takes place at the same venue on 22 to 26 October 2018. As the goals of the BAGAC initiative appear to be very similar to that of the BAWG science workshops, there is a need to explore potential collaborative synergies between the two groups at the upcoming meeting.

**Agenda, Logistics and Registration:** The BAWG meetings will be held over 3 days with the BRICS Astronomy Workshop on the first two days and the last day reserved for the BAWG meeting. The meetings will be held at the Protea Hotel in Umhlanga on 29-31 October 2018 and South Africa will cover only the local costs (accommodation and ground transport) of the delegates.

You can register to attend the meetings through our website portal - <a href="http://www.bricsastronomy.org/">http://www.bricsastronomy.org/</a>. Registrations closes on 29 September 2018 at 12h00. More information is also available on the website. Invitation letters for visa purposes can be requested by only registered delegates. The DST Secretariat contact person is Mr Charles Takalani, Email: <a href="mailto:Charles.Takalani@dst.gov.za">Charles.Takalani@dst.gov.za</a>, Tel No. +27 12 8436822