



Outreach Project: Astronomy For Change In Botswana Through Women in STEM-BW (WiS)



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ABSTRACT

INTRODUCTION

Women in STEM (WiS) is an organisation founded by a group of students and young professionals within Botswana. These young people are of different career paths in STEM fields and are from different institutions. WiS is an initiative that was funded by the Development in Africa with Radio Astronomy (DARA) and Newton Fund in 2018 after the completion of DARA and AVN student training. The organisation is mandated to share and distribute Space Science, Technology and related STEM fields knowledge resources to the nation, particularly the youth since they are of high populace in Botswana and form a higher percentage of the unemployed demographic. It focuses more on women empowerment in the STEM fields and further involves the male gender to encourage resource sharing and project collaborations. All this is facilitated through trainings, events, project development and collaborations. It is based in Botswana International University of Science and Technology (BIUST) under AVN-DARA affiliation and the Department of Physics and Astronomy, within the College of Science.

This poster is a presentation of the activities that Women in STEM (WiS) has undertaken in the area of Space Science, Technology and Astronomy outreach, awareness and development within Botswana. The Botswana government and nation has embarked on Space Science and Technology ground breaking agenda with global and regional projects such as SKA, AVN and DARA. It has since done this through human capacity building and training of students, young professionals and the nation at large according to the national Space Science and Technology Strategy. Women in STEM (WiS) is thus a product of this national endeavour. This poster presentation particularly on Astronomy and Astrophysics outreach and focuses collaborations with other Space sector and STEM organisations.

DARA PROGRAMME

This is a programme that is advancing the human resource capital building and development in Radio Astronomy for students and young professionals in the eight partner countries of the Square Kilometre Array (SKA) including Botswana. The WiS team, founding members and students are therefore products of the DARA capacity building.

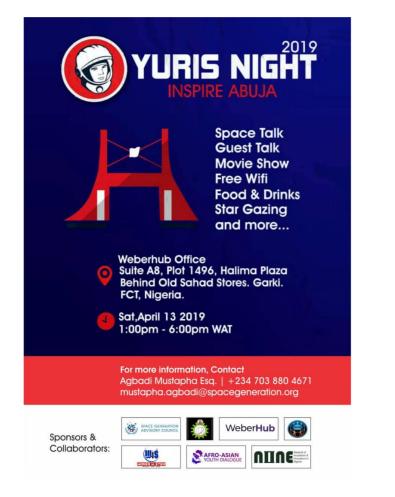
BOTSWANA SPACE AND SCIENCE TECHNOLOGY

Botswana government is working on the Space Science and Technology agenda according to the national policy and strategy. The vision being to aspire to be recognised as a leader among the African nations in the development and application of Space Science and Technology for prosperity for all. The strategy focuses on the following key thematic Satellite areas: Communication and Positioning, Planetary Science, Space Engineering, Cyber Infrastructure, Remote Sensing, Space Applications as well as Astronomy and Astrophysics. These are key areas that will drive socioeconomic development of the Space sector for the nation of Botswana. Botswana has an advantage in pursuing this endeavour since it has clear dark skies, minimal light pollution, radio quite and has a high extensive plateau landscape thus making it a suitable and favourable place to carry out particularly Astronomy, Radio Astronomy. WiS is therefore an organisation mandated to carry out the mission and vision of the national Space Science and technology Strategy.



INDIGENOUS AND CULTURAL ASTRO-**CAMPING NIGHT**









ASTRONOMY STUDENTS AND YOUTH

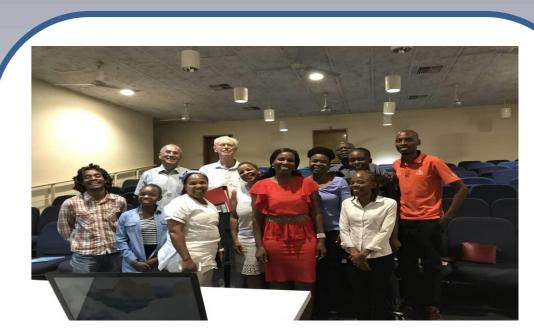
Women in STEM (WiS) is determined to be a platform that builds young people and students as it educates them about Astronomy, Astrophysics and the relevant STEM fields that place them in Space Science careers and fields. It is active in assisting general skills conversion into Astronomy relevant skills, e.g A lot of unemployed youth have ICT skills that can be transferred into Data Science and Astronomical data Processing.

ASTRONOMY AND THE PUBLIC

It is essential to educate and empower the general public about Astronomy. WiS does this by involving senior citizens, small business owners and general public in the conversation around the importance of Astronomy in the general lives of Batswana. Therefore linking the Tswana culture and Astronomy for Batswana to understand and relate to the Space Science and Technology Strategy and Astronomy knowledge sharing movement that is ongoing.















ASTRONOMY SPACE SCIENCE AND AFRICA

WiS has been involved in sharing Astronomy knowledge in Botswana, as well as getting involved in the Space agenda in Africa. This has been done through collaborations with individuals, institutions and organisations in the Space Science and Technology industry.e.g WiS has been collaborated with SGAC-Botswana, SGAC-Nigeria, Dare to Dream and New Era college on space activities.





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