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Cover image

The Pillars of Creation are set off in a kaleidoscope of colour in the NASA/ESA/CSA James Webb Space Telescope's near-infrared-light view. The pillars are filled with semi-transparent gas and dust. This is a region where young stars are forming – or have barely burst from their dusty cocoons as they continue to form.

Image credit: NASA, ESA, CSA, STScI;
J. DePasquale, A. Koekemoer,
A. Pagan (STScI).

EDITOR'S NOTE

Generation SPACE

Roscosmos's chief, Yuri Borisov, recently **declared** a new space race and pledged his nation's unwavering commitment to lunar exploration, stating that it is "not just about prestige and the achievement of some geopolitical goals...but about ensuring defensive capabilities and achieving technological sovereignty".

India, Japan and China are also looking towards the moon. NASA is setting up a return to the moon with its Artemis missions, and by now everyone knows Elon Musk's SpaceX is aiming not just for the moon, but Mars and beyond. Several other commercial space ventures, like Virgin Galactic and Blue Origin, have also entered the fray and have already come a long way.

It is becoming clear that we have indeed entered a new era of space exploration and innovation, both commercially and at the nation-state level. No surprise then, that many young people are dreaming of a career "amongst the stars". After all, it is today's youth who will be exploring the cosmos tomorrow. That is why we decided to create a special space- and astronomy-focused edition of QUEST, with the theme "Generation SPACE". To help us populate the issue, we approached the South African National Space Agency (SANSA), the African Astronomical Society (AfAS), the Square Kilometer Array Organisation (SKAO), and the South African Astronomical Observatory (SAAO) and the South African Radio Astronomy Observatory (SARAO).

What I did not realise, however, was how involved South Africa has been and is increasingly becoming, in this new space age.

Just the other day, the country's first National Space Conference was hosted at the CSIR in Pretoria, where Humbulani Mudau, CEO of SANSA, elaborated on South Africa's various current and upcoming space projects. From building Earth Observation satellites to a proposed Space Infrastructure Hub, the upcoming Deep Space Ground Station Network that will be situated in Matjiesfontein (a transformative alliance between SANSA and NASA), and Africa's first Space Weather Centre in Hermanus, to the development of a possible future African Space Port.

Not to even mention all the astronomical endeavours that you can read about in this issue, or the other ambitious space projects **being pursued** in the rest of Africa.

Having paged through this edition, I am sure you will also be astounded by South Africa's impressive and growing space presence. And if you want to make a career of these new cosmic ventures, have a look at our careers focus on astronomy and space science. Who knows, you might be the next Neil Armstrong!

With regards,



Fanie (RS) van Rooyen (Editor)

Go tloga go go aga disathalaete tša go Lebelela Lefase go ya go Setsi sa Mananeokgoparara a Sebaka se se šišintšwego, Neteweke ya Seteišene sa Fase sa Sebaka se se Tebilego seo se tlogo seo se tlogo bewa ka Matjiesfontein (selekane sa phetogo magareng ga SANSA le NASA ka didirišwa tša kgokagano tša maemo a godimo tšeo di lego bohlokwa go baromiwa ba Artemis le go tsošološa go ba gona ga batho ngwedii), go tsebagatšwa ga morago bjale ga Setsi sa mathomo sa Boemo bja Leratadima sa Sebakabaka sa Afrika ka Hermanus, go ya go tlabollo ya Boemakepe bja Sebakabaka bja Afrika bjo bo kgonegago bja ka moso – Afrika Borwa e netefatša gore e tla ba karolo ya moloko wo o latelago wa go nyakišiša sebaka.

Translated into Sesotho sa Leboa/Sepedi by Tebatso Isaac Makwala

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