

PROGRAMME

NATIONAL SCIENCE WEEK 2021

MAKING IT POSSIBLE THROUGH SCIENCE



1 – 7 AUGUST 2021

Online events, virtual exhibitions and tours, webinars, documentaries and more science in South Africa



*Making sure
it's possible.*

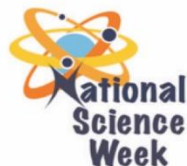
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science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



SAASTA
South African Agency for Science
and Technology Advancement

**STAY
SAFE**

VACCINATE TO SAVE SOUTH AFRICA

TOGETHER WE CAN BEAT CORONAVIRUS

PRE-NATIONAL SCIENCE WEEK

30 JULY 2021 (Friday)

TIME	TYPE OF ACTIVITY	DESCRIPTION OF ACTIVITY	HOST INSTITUTION	ONLINE LINK
10:00	Webinar	<p>ARTIFICIAL INTELLIGENCE (AI) AND 4IR IN AGRICULTURE : TACKLING FOOD INSECURITY</p> <p>How technologies are changing the future of work - understanding 4IR and the use of Artificial Intelligence in Agriculture to tackle food insecurity. Qinisani Qwabe (Rural Development)</p>	Nelson Mandela University (NMU)	Artificial intelligence & 4ir in agriculture: tackling food insecurity

NSW FOCUS WEEK (1 – 7 AUGUST):

02 AUGUST 2021 (Monday)

TIME	TYPE OF ACTIVITY	DESCRIPTION OF ACTIVITY	HOST INSTITUTION	ONLINE LINK
10:20	Documentary	Physics in my village: a Biogas documentary	Univen & HSRC	Biogas Documentary - Univen
11:00	Webinar	Essential facts about Covid-19: The disease, the responses and an uncertain future - For South African Learners (Grade10-Grade12) and Teachers	Academy of Science of SA	Essential facts about Covid-19
12:30	Webinar	The webinar will discuss the new covid-19 variants which have emerged in Africa as the continent records a new peak in infections. The virus mutations are not unusual, but those that are more infectious are worrisome Dr. Hazel Mufhandu	North West University - Mafikeng	New covid-19 variants which have emerged in Africa
13:00	Discussion	In Conversation with Prof Refilwe Phaswana-Mafuya : Learning curves from my non-linear epidemiology career journey	Academy of Science of SA	In Conversation with Prof Refilwe Phaswana-Mafuya
14:00	Webinar	How blue skies research created billions of Rands worth of impact in South Africa - SANSA - emphasis on the role that Space Weather Research has played in addressing a global challenge that has domestic (South African) impact.	South African National Space Agency (SANSA)	How blue skies research created billions of Rands worth of impact in South Africa - SANSA
17:00	Webinar	Crop breeding and conservation for the South Africa of today and the future – The role of ARC Agricultural Research Council (ARC)	Agricultural Research Council (ARC)	Crop breeding - ARC
	Recorded exhibitions	AET Africa	HSRC	AET Africa
		Dr Petro Erasmus - Math Whartels	HSRC	Math Whartels
		Astronomy - Combining multiple topics of physics to learn more about stars	NWU Potch	Learn more about stars
		Animations on Covid-19	UCT	Covid-19 Animations (English)

		Seeing how energy and matter flows and is recycled from primary producers (autotrophs) to primary, secondary and tertiary consumers.	LabXchange	Covid-19 Animations (Xhosa)
		Impact of changes to trophic pyramids		Energy and matter
		How does an Electric Motor work? (DC Motor)		Impact of changes to trophic pyramids
		The NSTC documentary will showcase innovations improving the livelihood of people.	National Science And Technology Council (Zambia)	How does an Electric Motor work? (DC Motor)
19:00	Live activity	Star gazing at Mahikeng Observatory: Prof. Thebe Medupe	North West University Mafikeng	Science improving livelihood in Zambia
				Star gazing - Mafikeng

03 AUGUST 2021 (Tuesday)

TIME	TYPE OF ACTIVITY	DESCRIPTION OF ACTIVITY	HOST INSTITUTION	ONLINE LINK
11:00	Documentary	Rising stars: the documentary : an astronomical journey from our beginnings through the development of astronomy research in South Africa and looks at what the future of astronomy holds for the country.	South African Astronomical Observatory (SAAO)	Rising stars: the documentary
12:00	Webinar	<i>From the discovery of the Higgs boson to modelling COVID-19: The role of AI.</i> Professor Bruce Mellado	Wits University	From the discovery of the Higgs boson to modelling COVID-19: The role of AI
12:00	Webinar	Bolepi dinaledi and Covid-19 pandemic: Dr. Motheo Koitsiwe	NWU MAHIKENG	Dinaledi
12:10	Webinar	A perspective on how scholars perceive attitudes to science in policymaking in South Africa. Dr P Sekhejane (HSRC), Prof Mamphweli (Stellenbosch), Prof K Motaung (DUT), Prof J Botai SAWS), Prof S Mpandeli (WRC) & Dr M Gastrow (HSRC)	University of Venda (UNIVEN)	A perspective on how scholars perceive attitudes to science in policymaking in South Africa
14:00	Webinar	Crop Breeding – South Africa's sustainability in the face of climate change and response to global competition	Agricultural Research Council (ARC)	South Africa's sustainability in the face of climate change and response to global competition Link
14:00	Live exhibition	Robotics : Year of Science : Fruit and Vegetables	UNISA (I-SET)	Fruits and vegetables - UNISA
15:00	Webinar	Tshwane university of Technology representatives will give insight on the effect of COVID 19 to the mental health if the institution specifically on students. The lecture will be for 20 min and the 40 min of roundtable discussions		Effect of Covid-19 to the mental health
17:30	Webinar	The Why and How of Aerospace Propulsion Research at UKZN. Prof Michael Brook	University of KwaZulu-Natal (UKZN)	The Why and How of Aerospace Propulsion Research at UKZN
	Recorded exhibitions			

04 AUGUST 2021 (Wednesday)

TIME	TYPE OF ACTIVITY	DESCRIPTION OF ACTIVITY	HOST INSTITUTION	ONLINE LINK
09:00	Webinar	The impact of Covid 19 on the farming communities, the contribution that Agri-SA and ARC has done in the farming communities, New technology or scientific way of farming, Crop health. C van der Rhee, Dr Lampbrecht, Dr E Cruywagen, Dr J Mulabisana, Dr R Pierneef	Ditsong Museum	The impact of Covid 19 on the farming communities
10:00	Webinar	<i>How do we know if and when science makes a difference?</i> Discussion with South African Journal of Science (SAJS) authors	Academy of Science of SA	How do we know if and when science makes a difference?
10:00	Poetry	Webinar based on science poetry	SAASTA	Science Poetry
11:00	Documentary	Aerodynamics Manufacturing & Design & Weight management Electric Components of the solar car. Telemetry, electronics & Race strategy. Technology behind the NWU Solar Car-Naledi 2.0	North-west University Potchefstroom	Technology behind the NWU Solar Car-Naledi 2.0
12:00	Webinar	Vegetables and Medicinal Plants The role of vegetables and medicinal plants in enhancing food, nutrition and human health security in South Africa	Agricultural Research Council (ARC)	Vegetables and Medicinal Plants
12:00	Webinar	The impact of covid-19 on food security in South Africa Prof. Olubukola Babalola	North-west University - Mafikeng	The impact of covid-19 on food security in South Africa
12:00	Documentary	Science, Technology and Innovation in a rural context: Highlights from the University of Limpopo	University of Limpopo	STI at UL
13:00	Webinar	UNIZULU Covid-19 research: The importance of uncertainty in many scientific predictions, and relevance of this to environmental controversy. Presenting scientific facts base on the scientific research on COVID-19 and looked at human behaviour towards the pandemic outbreak.	University of Zululand (UNIZULU)	UNIZULU Covid-19 research
17:00	Webinar	Oceans and People: Effects of anthropogenic activities on marine biodiversity. Nozipiwo Hambaze	SAEON Elwandle	Oceans and People Meeting ID: 988 1205 8794 Passcode: 921062
17:30	Webinar	MYSTERIOUS MARION ISLAND: Developing and Testing Radio Astronomical Equipment in the Cold. Ms Tankiso Moso	University of KwaZulu Natal (UKZN)	MYSTERIOUS MARION ISLAND
	Videos	How I Harnessed the Wind William Kamkwamba (MALAWI)	TED Talk	How I Harnessed the Wind
		Why Do We Have Different Seasons? - Did you know that the Sun's light shines differently on Earth at different times of the year? In this visualization watch as the Earth orbits the Sun, rotating, like a slightly tilted, spinning top.	LabXchange	Why Do We Have Different Seasons?

05 AUGUST 2021 (Thursday)

TIME	TYPE OF ACTIVITY	DESCRIPTION OF ACTIVITY	HOST INSTITUTION	ONLINE LINK
10:00	Webinar	The links between waste management and air quality	North-west University Potchefstroom	Waste management and air quality
11:00	Documentary	Vaccines: Everyday fears and answers: The film uncovers, normalises and responds to Khayelitsha-based residents' concerns around COVID-19 vaccination.	University of Cape Town (UCT)	Click here for more
12:00	Webinar	The role of 4IR during Covid-19 pandemic. Technology has played an important role in responding to coronavirus pandemic. Dr. Francis Lugayizi	North-west University Mafikeng	The role of 4IR during Covid-19 pandemic
13:00	Webinar	Food security and nutrition: contributing to sustainable development goals	SAASTA / CoE in Food Security	Food security
13:00	Live exhibition	Space science and Technology	University of Zululand (UNIZULU)	Space Science
14:00	Lecture	Dinosaurs of Africa . The fossils have been discovered across the continent – from the Sahara Desert to the Karoo. Dinosaurs of Africa outlines the different dinosaur's species, including fish-eating, sociable, and predatory dinosaurs, as well as those that were cannibals. Prof. Anusuya Chinsamy-Turan is a palaeontologist based at the University of Cape Town.	Academy of Science of SA	Dinosaurs of Africa
17:00	Webinar	Fisheries and its relation to sustainable use of ocean resources: The fishing issue and its relation to sustainable use of ocean resources: Ocean ecosystems exist parallel to human society.	SAEON Egangasini	Fisheries and its relation to sustainable use of ocean resources Meeting ID: 974 8786 4215 Passcode: 107056
17:30	Webinar	LIFTING BACK THE WATERS: Adventures in Southern African Marine Geology. Professor Andrew Green	University of KwaZulu Natal (UKZN)	Lifting back the waters
	Recorded Exhibitions	Pressure Science Show	Sci-Bono Science Centre	Science show
		Maths Thinker – Measurement – Grade 6 - 12:00 - Experiment – Test tube rocket -	Cape Town Science Centre	Maths Thinker
		Maths Thinker – Measurement – Grade 7 Exhibit – Nice Dice -		Maths Thinker grade 7
		Robotics	SANSA	Robotic
		Space Science Virtual Tour		Space Science virtual tour

06 AUGUST 2021 (Friday)

TIME	TYPE OF ACTIVITY	DESCRIPTION OF ACTIVITY	HOST INSTITUTION	ONLINE LINK
09:00	Documentary	Air Quality	North West University Potch	Air Quality – NWU Potch
09:00	Live engagement	<i>Indigenous Knowledge System (IKS)</i> Prof Tshisikhawe, Adv Dr Matshidze	University of Venda (UNIVEN)	UNIVEN IKS
10:00		<i>Renewable Energy Recorded Exhibition</i> Dr TS Mulaudzi, Dr EN Maluta		Renewable Energy Exhibition and the Recorded Exhibition
10:35		The Secret of Success: Star Schools in the Vhembe District: Dr S Kaheru		The Secret of Success: Star Schools in the Vhembe District
10:30	Webinar	The undergraduate student will have a 30 min quizzes based on the current world COVID 19 status quo while basing their facts on science. Prizes will be provided for three winners in the quiz gaming.	Tshwane University of Technology	Join TUT webinar
11:00	Webinar	Mechanisms, funding and state capability for poverty and inequality reduction (post-Covid) in South Africa	Academy of Science of South Africa (ASSAf)	Mechanisms, funding and state capability for poverty and inequality reduction (post-Covid) in South Africa
12:00	Webinar	Multiple losses & complication in grief as mental health concern during covid-19 pandemic: Prof. Alida Herbst; Dr. Nelia Drenth; Ms Annette De La Porte; Prof Thobeka Nkomo	North-west University (NWU) Mafikeng	Multiple losses & complication in grief as mental health concern during covid-19 pandemic
12:00	Documentary	Profiling women in Science	Academy of Science of South Africa (ASSAf)	Profiling women in Science
13:00	Webinar	Advances in Crop Protection The role of plant bioactive compounds and biological control	Agricultural Research Council	Advances in Crop Protection

07 AUGUST 2021 (Saturday)

TIME	TYPE OF ACTIVITY	DESCRIPTION OF ACTIVITY	HOST INSTITUTION	ONLINE LINK
09:00	Learner virtual Camp	Misava Yile ku Cinceni – My World is Changing	SAEON	Misava Yile ku Cinceni – My World is Changing Meeting ID: 917 3327 4712 Passcode: 277265
11:00	Virtual Science Show	Virtual Science Show	Cape Town Science Centre	Cape Town Science Centre virtual show
12:00	Documentary	Isinuka healing water	Walter Sisulu University	Isinuka healing water