

## Making your Facebook business page lively

IT'S 2013 — Facebook has been around for the best part of a decade and has over one billion members.

Everyone from your grandpa to your high school date is on Facebook and there are millions of people socialising on this social network channel daily. Even though all the stats regarding Facebook are pretty impressive, is it really worth all of your efforts for marketing purposes? It definitely is, if you use it correctly with a clearly laid out strategy.

Many businesses with Facebook business pages only update their pages with a generic comment or question, leave it alone for a few days, and then wonder why on Earth they are not getting any new feedback and engagement from their network. There's no definite rule book on what you should do on Facebook to make sure your social media efforts are not in vain, but here are five tips that can help you make your Facebook business page more lively and drive engagement from your network.

### Timing your posts

Most people start their day going to work, checking their e-mail and other messages, and drinking a cup of coffee before they start with their work schedule. While this might sound crazy, use this to your advantage to help your business connect with your network online. Do a test and see when your posts receive the most interaction. Test them three times daily — in the morning, lunch time, and early evening to start with. When you have tested and established when you should post your updates, you will be able to connect with your network on Facebook more effectively.

### Magnetic content

Just as you will lose interest when someone at a traditional networking event starts blabbering about something that you find dull, your community on Facebook won't stick around if your updates are boring and over self-promotional. One way to overcome this is to focus on magnetic content. This is content that your audience will find relevant, interesting, and will encourage your audience to share with their network. Share and update links to funny images, useful content and interesting facts. When you are providing good content that benefits your network, they will feel more inclined to connect with your brand on Facebook.

### Pictures

Pictures tell a story. Take advantage of this and post relevant, interesting, and captivating images along with your updates. You really don't need an over-the-top, fancy camera; just make sure that the pictures that you post will make an impression on your audience and that they are relevant. Funny pictures with quirky remarks also have the ability to drive engagement among your audience.

### Upload a new cover photo

Your cover photo is an important space for your business on Facebook. Each new update or comment that you make while acting as your brand on Facebook will display your cover photo. It allows you to reflect your business values and culture, while also showcasing what your business stands for. Take some time and create a cover photo that will make an impression. Keep it simple and professional. A human face on your cover photo will make it more personal.

### Feedback

Many people online give their feedback and input regarding a specific product, service or brand. Use your business page on Facebook to get this information from your customers instead of paying for focus groups. If you are launching a new set of tools at your hardware shop, ask your network what they think about your idea. If you are getting ready to launch a new product line or you've recently made changes to a product or service, ask your network how they feel about it.

People want to feel like the brand and business care about their opinion.

Put a personal spin on your Facebook page and focus on engaging with your network. This will help your brand become more memorable and appealing to your customers.

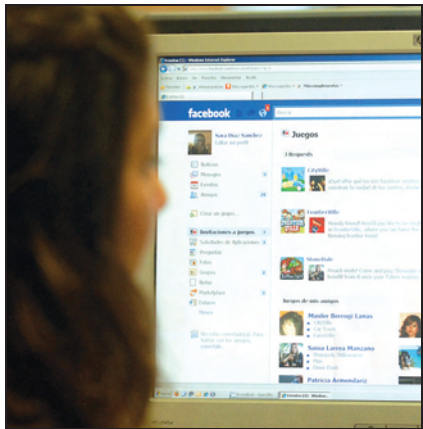


PHOTO: SUPPLIED

Although there's no definite rule book on what you should do on Facebook to make sure your social media efforts are not in vain, there are some things that can help you make your Facebook business page more lively and to drive engagement from your network.

# Back to the start of the universe

**COSMOLOGY:** Local man tells how despite lack of training he made science his passion

### TRISH BEAVER

A GENERAL interest in physics has become a life's passion for Pietermaritzburg resident Frikkie de Bruyn, who has invested a great deal of energy in studying cosmology and the mysteries of the universe.

He believes a study into the cosmology of the universe will equip young scientists with greater skills. While he has no formal tertiary education in maths and physics, past what he learned at high school, it is his passion and determination that have led him to form and head up a local cosmology section of the ASSA (Astronomical Society of Southern Africa).

He believes that students and people with an interest in physics and astronomy should join to work out the answers to questions that have puzzled scientists for centuries. De Bruyn says that the recently announced SKA project (Square Kilometre Array) will open up new avenues for B.Sc. students with an interest in astronomy and cosmology.

While De Bruyn encourages young scientists to join his society, he admits that his own knowledge was self-taught. He passed his matric in 1962 and went straight to work overseas for the South African Tourist Corporation, where his job was to encourage foreign tourists to visit South Africa.

He returned to South Africa and started working for Home Affairs, and in 1984 he transferred to the KZN Provincial Administration. He was working at Natal when his interest in physics was awoken.

He said: "I read books written by Professor Stephen Hawking, *A Brief History of Time*, among others. I was fascinated and then I used to go to the library in my lunch hour and read up on physics and astronomy. I was invited to join the then Midlands Centre of the Astronomical Society of Southern Africa.

"After my retirement I did my first presentation to the ASSA symposium held at the Pretoria centre of ASSA in 2002. After a presentation to the ASSA symposium in Durban, I approached the ASSA council asking for permission to establish a cosmology section."

Cosmology is the study of the origins and eventual fate of the universe. Physical cosmology is the scientific study of the origin, evolution, structure, dynamics, and ultimate fate of the universe, as well as the natural laws that keep it in order.

"While astronomy is the study of stars and planets such as our solar system and galaxies, in cosmology we study the universe as a whole and go much further back into the history [evolution] of the universe. Cosmologists study the first galaxies and stars, the role of quasars [black holes in the formation of galaxies] and the very early universe. We can go back to when the universe was a trillionth of a billionth of a billionth of a billionth of a second old."

De Bruyn believes the SKA offers budding cosmologists many opportunities. "They'll get a chance to study the early galaxies, analyse the light emitted, study and solve problems such as how did the first stars and galaxies form and what were conditions in the early universe. We still don't know if the universe evolved from a quantum object. There are still so many questions to be answered," he said.

"The South African Cosmology section started off with 28 members



PHOTO: STEW NOLAN

Frikkie de Bruyn at home in Hayfields.

and currently we have 51 members, of which one is in Moscow, one in Canada, one in Australia and the rest in South Africa. Our section is very active and we communicate via the Internet. Members circulate news of interest to cosmology, such as press releases and scientific papers. We

discuss these and their implications for cosmology."

Recently the group worked on a complex problem and discovered that the calculations done by an eminent university in America were incorrect. It was a great boost for the group.

## COMMON QUESTIONS ABOUT COSMOLOGY:

**How did the universe get as big as it is today?**

We can see 13,75 billion light years back in the history of the universe (light travels at 300 000 km/s in a vacuum). It took this light 13,75 billion years to reach us.

It was Alan Guth who established that the very early universe expanded exponentially and, of course, cooled down in the process. This exponential expansion of the universe from an object smaller than an atom is known as the Big Bang Theory.

**What is Cosmic Microwave Background Radiation (CMBR)?**

This was discovered in 1956. The Cosmic Microwave Background Radiation is a remnant of the Big Bang. About 7 500 years after the Big Bang, the universe cooled enough for electrons to form atomic nuclei and, very important, for light to travel freely. It is this light that we now observe in the microwave wave-

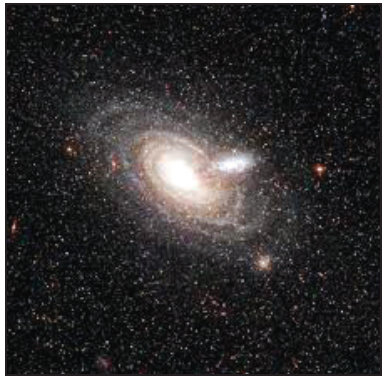


PHOTO: SUPPLIED  
Space seen through the lens of the Hubble telescope

length of light as the Microwave Background Radiation.

It is much cooler than the microwaves we use in ovens. Its temperature is about -270° Celsius, or about 3,75 Kelvin. Zero Kelvin is absolute zero, the point at which all thermal motion ceases. We can only see a very small portion of light rays.

**What are solar flares?**

A star, such as the Sun, is a ball of very hot gas held together by its own gravity. At its core, it fuses hydrogen into helium (like a hydrogen bomb) and releases enormous amounts of energy in the process. It is some of this energy we feel as heat in the sunlight.

The sun is highly magnetised and the magnetism comes to the "surface" of the Sun in the form of giant arches. When these arches meet and are strong enough, it snaps and sends extremely energetic protons out, sometimes towards the Earth.

It is these particles that interact with the magnetic sphere that protects the Earth and cause the Northern Lights and Southern Lights.

**Stars**

Some stars are massive and end their lives in tremendous explosions called supernovae. The elements of everything, including

"By using maths, physics and astronomy, we can begin to understand a problem, make a sketch if you like, and then develop the maths equation to explain and solve the problem. There are many problems that still have to be solved such as dark matter, dark energy, the ques-

tion of is the universe infinite, the shape of the universe, and we may discover more questions than answers as we uncover information."

De Bruyn says that cosmologists are trying to go back to the beginning of the universe to try and figure out what is likely to happen in the future. "I am convinced we will solve the riddle of the beginning of time when we unite General Relativity and Quantum Physics."

De Bruyn says that as "end of time" theories have become popular science, cosmology does not support the end of the world.

He said: "The greatest threat to the Earth is a meteor that goes undetected and can wipe out all life on Earth, depending on its size. A comet can do the same, but our chances of detecting it in time are better than for a meteor."

He does not find that his quest to understand the universe conflicts with his religious beliefs at all. "Religion is based on belief where science is based on fact. Even if I should come to understand how the universe was formed, I would still have a personal belief in God."

As De Bruyn works in his garden, he is constantly puzzling over the questions of physics and maths, and sometimes when he thinks he has made a breakthrough, he runs inside to scribble down his new ideas. These will be shared with his peers and they will try and find pieces of the puzzle that fit together.

## Scientists already planning for Mars mission that will probe for signs of life

THE next robotic rover to explore Mars in 2020 should scour the surface of the red planet more closely than before for signs of past life, a Nasa science team said recently.

The U.S. space agency's Science Definition Team (SDT) released a 154-page document containing its proposals for the next Mars rover, after five months of work.

The mission would use microscopic analysis for the first time, collect the first rock samples for possible return to Earth and test ways to use natural resources on site for a future human trip, it said.

The Mars 2020 mission would build on the work being done by Nasa's Curiosity rover, which has been exploring the red planet since August 2012 and has already found evidence of potentially habitable environments.

The mission would present "a major step toward seeking signs of life", said Jim Green, director of the Planetary Science Division at Nasa headquarters.

The next step is for Nasa to analyse the recommendations and issue a call for scientific instruments, which could include higher resolution imaging devices, microscopes, fine-



PHOTO: SUPPLIED

The surface of Mars — the next rover to go to Mars will use microscopic analysis for the first time, collect the first rock samples for possible return to Earth and test ways to use natural resources on site for a future human trip.

scale mineralogy, chemistry and organic carbon detection tools to scan

for biosignatures on the surface of Mars.

"To combine this suite of instruments would be incredibly power-

ful," said Jack Mustard, SDT chair and professor of geological sciences

at Brown University.

The rover would collect about 31 samples that might someday be returned to Earth, representing "a legacy for understanding the development of habitability on the planet", he said.

The U.S. space agency has not yet devised the technology to bring the cache back to Earth without disturbing its contents, and no plans have been set for any potential sample return.

The next Nasa mission to Mars is a November launch of Maven, an orbiter that will study how Mars interacted with solar wind and lost its atmosphere.

The European Space Agency will follow in 2018 with its ExoMars rover.

John Grunsfeld, Nasa's associate administrator for science, said the 2020 Mars rover would get the U.S. space agency to the next step in the "quest to answer the grand questions", before a planned human mission in the 2030s.

"Do we see any evidence of past life in those habitable environments?" he said, alluding to the aims of the future missions.

— AFP.