The Aktua Times



2nd Edition

Table of Contents

Letter from the editor
Academics & Research
Career evenings
Lecturer interview
Research Article
Social & Sport
Poker Night11
30 Seconds Social
Soccer Day
Aktua Ball 201215
Final thoughts
Uit Agie se Magie16
Just for kicks18

Contact Us

Have any questions, complaints, suggestions..? Please don't keep them to yourself – contact us via any of the following channels:

• E-Mail: aktua@up.ac.za

• Website: <u>www.up.ac.za/aktua</u>

Facebook: https://www.facebook.com/aktuaUP

Or swing by our office at Loeloeraai Room 1-6.



Letter from the Editor

"Take over the compiling of the Times," they said,

"It'll be fun!" they said.

Well, they were right... It sure was fun! Even if they did slightly downplay the amount of work that goes into putting together this little semi-annual magazine... I'm not complaining for a second, though. As a still very-much-new-to-Aktua first year, it's an amazing honour for me to take over as editor. I realize that I have some big shoes to fill, and I look forward to doing my best to live up to the legacy.

Firstly, a huge thanks to my fellow committee members for all the help with this edition of the Times – I could never have done it without you. Now, back to business:

As the dust starts to settle and we all begin our preparations for the final exams, this edition takes a quick glance back at Aktua's very busy, but very successful 2nd semester. From 30 Seconds to soccer, from Casino Royale to FNB, from ABSA to the annual ball, we had it ALL this semester. Everyone who participated will agree - it was a massive few months, and we look forward to doing it again next year. Hopefully even more students will be able to experience the wide range of benefits associated with attending Aktua events. Balance is, and has always been, key, and I firmly believe that our society provides something for all tastes and preferences... So come on, join in, and let us surprise you!

But for now...Best of luck with exams – When you're struggling to stay motivated, simply remind yourself: Holidays are just around the corner... Works like a charm for me!

Until we meet again, have fun, and make a point of it to party like it's the end of the world. Who knows? The Mayans might just be right...





Career Evenings



ABSA CAREER EVENING 2012

On the 29th of May, Aktua hosted the third annual ABSA Career Evening for students from the Department of Mathematical Statistics, Mathematics and Applied Mathematics, Agricultural Economics and of course our own students from the Department of Insurance and Actuarial Science.

The evening consisted of a presentation from ABSA where the contributions from each of these fields within the bank were highlighted. The students were treated to a real inside look at what may be expected from them should they one day work in the banking environment. The HR department also provided all the information required by students who are interested in applying for ABSA's prestigious graduate programme.

The evening was concluded with a catered networking session, which gave the students an opportunity to ask questions in a one-on-one environment whilst enjoying the delicious snacks and drinks provided by ABSA.

Aktua would like to thank everyone who came to the event, It was a lovely and enlightening evening. We hope to see everyone there again next year.

Marianne Behr



FNB CAREER EVENING

On the 2nd of August 2012, students from the department were fortunate enough to have two representatives from First National Bank to come and tell us more about the role of actuaries in the banking environment and especially FNB.

Some of the interesting thoughts they shared with us were on how banks had to cope with the effects of the recession on the investment portfolio, as well as the development of methods to minimize the losses they incurred. Another interesting topic was the calculations behind FNB's new fuel rewards programme, which gave a perfect example of an actuary's daily tasks and responsibilities.

All the students found the talk very informative and the department wishes to thank FNB for taking the time and for sending the experts to come and talk to the students. We look forward to hosting them again in the future.

Vivian Olivier

Lecturer Interview

Background:

Full name: Frederik Jakobus Conradie Beyers

Date of Birth: 1973/05/28

Family: I am married to Hanni and we have

two boys, Andries (5) and Muller (3)

Qualifications: My highest qualification is a

PhD in Mathematics.

Position at UP: Senior lecturer.



Where did you grow up, and where did you attend school?

I grew up on a farm near Lichtenburg in the then Western Transvaal. My primary school was Laerskool Rooigrond, a farm school with 60 children. These were probably the most wonderful years of my life – no cares in the world. We later moved to Pretoria and I went to Wonderboom High School.

When and why did you decide to study Actuarial Sciences?

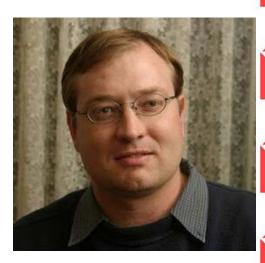
Actuarial science and Engineering were always two options that I seriously considered for study. Ultimately I decided to go for actuarial science. During my third year of study I experienced a kind of a 'mathematical epiphany', when I suddenly realised – or at least I thought I realised - what mathematics is all about. After graduation I decided to continue with studies in pure mathematics, philosophy and a lot of other interesting stuff.

During and after my PhD studies I started to realise the vast potential for applying the mathematical theory I was working on in the financial and actuarial fields, and decided to continue with actuarial studies – and I am still at it.

From being a student at UP, to lecturing students at UP... Are these two worlds as far apart as people would think?

The two worlds are far apart in the sense that if I knew as a student what I know now, I would do things quite differently. Students and lecturers have different objectives. Students generally want to pass with as little effort as possible. Lecturers want to get the maximum amount of information across to students in as little time as possible. There is an inherent conflict of interest here that is not so easy to bridge. Also, the generation gap between lecturers and students sets the two worlds apart.

In this sense, my current actuarial studies helped a lot with bridging this gap. Being an examwriting student myself, I gained a lot of sympathy with the plight of my "fellow" students.



For example, when setting a test, I often sense that I am setting one of those horrible questions that I would hate to get in an exam myself – and I try to keep them to a minimum...

You have a very full life, with your family, your career and continuing your studies. How do you manage to balance your time between everything?

Well, I don't. Sometimes one needs to be pragmatic, prioritise, delegate if things get rough.

Do you have any specific quotes or motto's you live by?

When I was younger I thought I had the answers, but with some study and life experience down the line, I realised that I don't really fully understand anything – and that nobody else can do much better than that either. So in short, I am a sceptic – no quotes from gurus, no sure-footed motto's, no certainty.

What are your plans for the future?

I plan to spend more time and energy on actuarial and mathematical research. In South Africa, the actuarial community is lagging behind many other countries in terms of quality actuarial research. So I hope that we can start something at UP that could help to turn around this trend. Any students who share this vision should please come and talk to me!

People make a lot of jokes about actuaries (or any people involved in mathematics for that matter) not having personalities or social lives. Do you think these jokes have any basis?

Well, everyone that want to do what it requires to become an actuary should be at least a little bit nerdy - although we all try very hard to hide it ... So yes, unfortunately there may be some basis for those jokes. On the other hand, those people that make the jokes should perhaps be a bit more careful. It is said that Bill Gates once advised some youngsters: "Be nice to nerds. Chances are you'll end up working for one".

If the world really does end in December of this year... What would you most regret NOT doing?

If it does happen, I regret that I and billions of others did not try our level best to get the hell out of here a long time ago. But then again, if the planet Nibru will hit us within two months' time, without anyone picking it up on any telescope or even with the naked eye, then we can assume with approximately the same probability that Superman or one of his superhero colleagues will come and save us.

What advice would you give to students studying Actuarial Science?

It is not that difficult – many others that are less intelligent than you or me did it before. To get through, you need a little bit of talent, a strong dose of motivation and a whole lot of hard work.

Your Favourite...

- * Food? I know this sound barbaric to the vegetarians, but I am a red meat lover.
- * Past time? (at varsity and now)

Varsity: I will leave this one to the paparazzi.

Now: Playing chess. Philosophising and arguing with friends.

- * Subject when studying? During my third year of study at UP, the Partial Differential Equations course under Prof. Sauer was an eye-opener for me.
- * Show(s) to watch on television? Jake and the Neverland Pirates that is all that my kids allow me to watch.
- * Type of music? Ambient and any modern, creative music.
- * Place to spend your holidays? Lodge next to the Molopo river.

Best and worst parts of...

* Studying Actuarial Science?

Worst: Failing something. Yes, yes I failed something. It is so totally and absolutely cruel to the ego. Also, sometimes when my kids get angry at me they tell me: "Dad, go study!"

Best: Passing something. I don't know about you, but every time I pass something it feels as if the sun shines on me for the first time.

* Working with students?

Worst: Two or three students can disrupt a class and turn a whole semester course into a nightmare. But this you get in all walks of life.

Best: Being around young, energetic and vibrant people like students helps to keep your mind young and fresh.

* The working environment as opposed to student life?

Worst: The University is a free environment, but you'll never be as free as in your student days.

Best: You take full responsibility for your life and some of those around you.

* Living in Pretoria?

Worst: Too far from the sea? Possibly within the range of the latest Iranian Shabab 4 ballistic missile series?

Best: Pretoria is a lovely city. Not too big like Jo'burg and not too small like Potch...

* Having a PhD?

Worst: In everyday life people expect you to make their petty arithmetic calculations for them. I think that many people confuse the terms "mathematician" and "accountant". Best: At an academic institution, a PhD opens some doors that could potentially put you on par with any other profession or career choice in the working environment.

Arrogance in the Workplace:

<u>Do we need an attitude adjustment?</u>

In the present day and age, we are taught from a very young age to be confident. "Believe in yourself" "walk tall", "never admit defeat" - these are all phrases we've heard often and that make sense, to a certain extent. However, we have to wonder: how often does confidence turn in to arrogance?



The answer is: Far too often, especially in the actuarial profession. Todd Bault, a senior research analyst at the Institutional Research, Sanford C. Bernstein & Company, and a Fellow of the Casualty Actuarial Society, raised his concerns over this issue in an interview with The Actuary (A magazine published bi-monthly by the Society of Actuaries).

"Most actuaries have a certain degree of intellectual arrogance, which manifests itself as a 'who cares if no one else thinks I'm right—I know I am'-attitude". He continues to state that this approach can never work if we strive towards effective client communication.

Upon doing further investigation into this matter, we quickly come across the name Stanley B. Silverman. This organizational and industrial psychologist, who is also associate provost and dean at the University of Akron Summit College, worked together with a team of researchers to developed The Workplace Arrogance Scale (WARS). This scale attempts to quantify arrogance, and provide empirical data. With this data, some major conclusions were reached, including the following:

- The more arrogant a person is, the more self-centred and less agreeable they are likely to be.
- The higher the level of arrogance, the lower the level of job performance.
- Contrary to popular belief, arrogance is, in fact, negatively correlated to intelligence.
 - This means that, the more arrogant people are, the less reason they actually have to be!
- High levels of arrogance normally indicate low levels of self-esteem, and arrogance is thus being used as a cover the make the individual feel better about him-/herself.

The general impact of arrogance on a business can be concluded to be negative. So, how do we combat against this negative attitude? Silverman is of the opinion that the answer is humility.

A very accurate definition of humility is found in a quote from Harold C. Chase:

"The wise person possesses humility. He knows that his small island of knowledge is surrounded by a vast sea of the unknown."

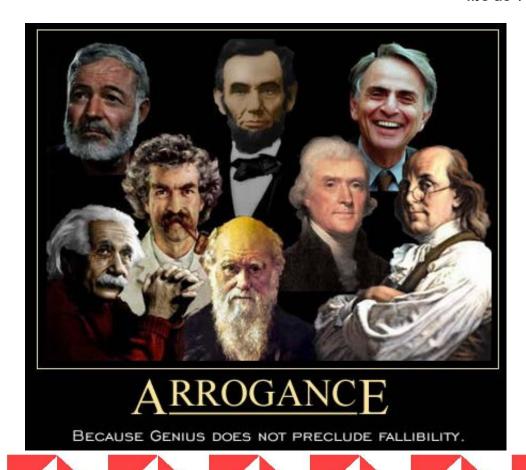
Practicing this principle every day is easy – especially if you are still a student. Simply spend some time with someone from a different faculty and ask them about their specialty, or change the TV to a channel you never watch (in my case, this would be the food network.) To make humility fun, you could always play 30 Seconds with the rest of Aktua (see article on page 11). Pretty soon, you'll find that you have very little to be arrogant about...

If all else fails, remember: No matter how good you think you are at something, there will always be an 8 year old Asian kid who can beat you at it...

Ilse de Villiers

'Arrogant?

How do you mean?





SA3 has successfully recruited actuaries and students over the past 6 years, offering a truly professional recruitment service right here in South Africa. This idea originated from personal experience when seeking job opportunities abroad and we quickly realized the benefit that having worked as Actuaries in the industry brings to the business. Having studied, written actuarial exams and worked as actuaries ourselves, gives us an insight into the delicate balance of candidate experience and employer expectation, unmatched by any other recruitment agency in SA. We truly have established SA3 as one of the leading actuarial recruitment firms in South Africa over the past few years.

We deal with nearly all the local actuarial employers and we are proud to say that the feedback from them is both positive and encouraging. Not only do we have extensive knowledge and experience of the local market, but we have also both worked for major companies abroad. This enabled us to build an extensive network of global partners in countries like the UK, Australia, Asia and the rest of the world. Even though international opportunities are limited for graduates without the right to work abroad, we are happy to share our personal experience with candidates, offering advice on how to position yourself for future international opportunities.

Whether you are starting out on your professional career or are at a crossroads, we are confident that we would be able to assist. Give us a call for an open and honest discussion. Our aim is to give your career direction!



Wilhelm (FIA, FASSA) qualified as an actuary in 2004 and co-founded SA3 (South African Actuaries Abroad) in 2005 with his wife Helena. He worked

in the Life Insurance Industry in both the South African and UK markets and gained his experience at some of the major insurers in both countries. His 3 kids take up most of his spare time, but besides that, he is a keen traveller. His hobbies include any sport that's played with a ball.

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Henda (FIA, FASSA) qualified in 2001 and has 12 years of industry experience.

She has worked in life and health insurance in South Africa and Australia before she joined the team in 2009. Her hobbies include running, tennis, camping, herb gardening and 4x4 trips with her husband and children.

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Aktua Committee 2012



Front Jean-Francois Greeff, Samantha Pretorius, Marianne Behr.

<u>Back:</u> Kelefilwe Kungwane, Ilse de Villiers, Bophelo Matlaila, Albert Mijburgh, Lawrence de Jesus, Vivian Olivier.



Poker Night 2012

On the snowy(!) evening of 7 August 2012, Aktua and SAIIE (the Industrial Engineering Student Society at Tuks) hosted our poker evening for the year. With the elegant theme of Casino Royale, a dress code to match and the classy Italian restaurant 'Capeesh?' as the venue, it promised to be a fantastic occasion. And did the night live up to its promise! Everyone who attended will agree that it was an amazing evening defined by pasta, cocktails, plenty of laughs and skilful poker all round.

During the evening Aktua continued our tradition of buying the person with the lowest number of poker chips per table a free shot of tequila, or 'the shot of shame' as it is now known.

The finals table was played off in a 1950's style wine cellar in the restaurant, which provided the perfect ambiance and mood.

Many actuarial participants had the hypothesis that "an engineer will only beat an actuary at poker the day it snows in Pretoria"! Now, although the climate on the night was against us, we are proud to announce that the winner of the poker competition for 2012 was indeed a third year actuarial science student <insert name>! We extend our congratulations to her for putting all of her statistics theory to good use and for making the actuarial student society very proud! The three top poker players for the evening were each awarded with a prize for their skill.

Please join us next year! Whether you are a complete beginner or a pro, we encourage you to participate in this fun-filled tradition. Hope to see you there!

Lawrence de Jesus



30 Seconds Social

A 30 Seconds Evening for the first year students was hosted by Aktua during the first week of August at Oom Gert's on campus. The evening was not only very enjoyable, but also gave us insight into the level of general knowledge which some of our students possess.

After a few hours of mildly dyslexic card reading, a lot of pointing and shouting, a few very funny misunderstandings and a number of gaps in the understanding of "the real world" becoming apparent, the winning team was announced. Each member from the winning team received a prize, as well as that warm feeling you only get when realizing that you are the best of the brightest.

I end off, however, with the best of the not-so-bright moments of the night. The answers to these descriptions are listed at the bottom of the article. Have a good laugh, but be honest when deciding whether you would've been able to describe them better yourself...

- 1) "This is a very famous guy, he is good friends with both Jay Z, and Rihanna"
- 2) "This is a song, it goes: 'It's fun to stay at the ...'"
- 3) "I think it was a Pokemon"
- 4) "It's like the piercing that guys can get. But his brother"
- 5) "When people are shocked they shout it! Now say it twice."

- 1) Vasco da Gama
- 2) ANCYL
- 3) ABBA
- 4) Prince William
- 5) Yo-yo

Albert Mijburgh



Soccer Day

Spring + Saturday + (mostly) Sunshine – Semester Test Stress = Soccer Day 2012!

This was the only equation the eight teams that took part in the Aktua Soccer Day 2012 were aware of on 20 October 2012. With three teams of BCom students and five from our own department, it was once again proved that soccer remains one of the most popular sports. The team names were rather interesting; we had the likes of Team FBS and Proc Print. One could easily identify the actuarial students' teams by the names — we're not exactly known for our levels of creativity!

It must be said, however, that the soccer skills displayed weren't bad at all, despite team 'Glamour Boys' scoring an own goal. Some might say they brought bad luck to themselves – choosing the nickname of a certain South African Soccer Team may not have been the smartest move...

The final match was a pretty tough one between Bolzano and X. They went into extra time, and never gave up, even when it started raining. Nothing short of a cloud-burst was going to stop these eager guys from finishing what they started. Finally, Bolzano scored the only goal in the match to win the tournament.

The winning team was awarded a trophy, PVM water bottles and energy bars. It was most definitely a morning well spent. Definitely a good break from number-crunching and all that stress! We hope to see even more participants next year.

Kelefilwe Kungwane





Aktua Ball 2012

This year, the annual Aktua Ball was held on the last day of August at the Pretoria Country Club. The elegant venue provided a perfect backdrop for a sophisticated evening, where our students had the rare opportunity to don their finest attire and enjoy an evening away from the books.

We were honored to host Professor Bekker and her husband from the Department of Statistics. Several other lecturers from their department also attended the evening.

As always, entertainment was provided in the form of the Aktua Ball Quiz. This year it proved to be an especially challenging competition, and as a result the scores were very close. We also had a best dressed male and female this year, each of whom received a stylish gift for their effort in looking the part.

It was a wonderful evening, with delicious food, good music and great company. We would really like to thank our sponsors, NMG and SA³ for their generous donations. Due to their generous sponsorship, Aktua will be making a donation to the Tshwane Home of Hope on their behalf.

We hope to see many more of our students at the Ball next year.

Marianne Behr



<u>"Uit Agie Se Magie"</u>

First Year

What a year – it feels like at least three lifetimes have gone by since we began our pursuit towards numerical superiority. Yes, we are indeed studying Actuarial Science - the degree for which you should get a diploma simply if you can pronounce it correctly. Many a lecturer still has trouble with this...

It's been an adventure from start to finish – We've progressed from having class on every side of campus (without even knowing where the Maths building was), to... Well, still having class almost everywhere, but at least now getting there with less difficulty and all the while discovering new frontiers. (If anyone meets a senior who knows where the Goldfield Labs are, please let me know.)

We've endured grueling MatLab programming, learnt that sometimes lunch is more valuable that a Stats practical, and discovered that it is indeed possible to write a semester test on the Saturday of a long weekend... In the end, although the phrase "I need to get xxx percent for the next three class tests to get exam entrance" has become far too common these days, we can still say with certainty that we are slowly but surely getting there.

Final thoughts with exams coming up? We've survived everything thus far – now, it's time to finish with a bang! Remember – this should be the last time we EVER have to study FBS and EKN...

Let's give it all we've got!

Second Year

Nearing the finish line of the actuarial degree – only one third left before we're heading to off the world of work. Well, most of us, hopefully...

The year has really been a rollercoaster of animated feelings of nostalgia. Missing the chilled vibes of High School and all those hours you spent just loafing and taking the day as it comes. Who knew that varsity, and especially second year, was going to be such a reality check! However, it's safe to say that we are a resilient bunch of students who patiently endure through all the challenges we are presented with.

One of these challenges includes a specific Department deciding to intensify a module that shall not be mentioned... Furthermore, the amount of duties is barely letting us survive – it's a knife-edge balance between trying to adjust to the pressure of second year and its requirements, and trying to manage your social life. Most of us are just wishing it was December all year long!

Inevitably, even this drama-filled year is drawing to an end, and now we have the exams ahead - So chin up and smile, because, despite everything, you have made it with a bit of studying and a lot of staying away from Glee and Vampire Diaries!

Good luck for the exams...

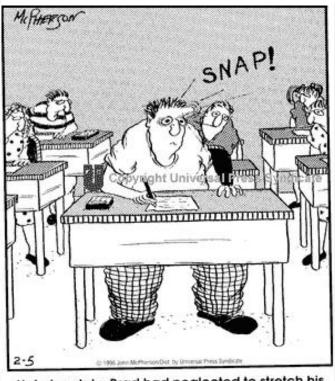
Third Year

So this is it, the home stretch! Well away from our earliest days in first year, when we were all presented with those 'encouraging' actuarial qualification statistics. Since then, we've learnt much more than what there is to know about random variables, or even what there is to know about integration in terms of random variables (Yay!)

Many of us may have learnt and perfected the art of falling asleep in the library. Not that we ever actually do this! More disturbing still, the rumours that some, when they fell asleep, had literal nightmares comprised of nothing but SAS coding...

Then there are the careers fairs and the questions that many of us have asked, and the freebies for our efforts! We've learnt how to make friends in the long queues at exam perusals and we've learnt how to be persistent - logging into ClickUP countless times per day during our holidays, when it seems as if our results simply refuse to be published. We've learnt how to comfort academically disappointed friends and we've learnt how to laugh hysterically when a semester test feels like it truly went 'that badly'.

Regardless of all of the above, if you are reading this as a third year student, you've learnt the most important thing of all: to work hard towards your goals and never to give up! I would like to congratulate all of the third years as you look forward to throwing your graduation hats up into the air very soon. Thank you for sharing your journey with us and best wishes with your future endeavours!

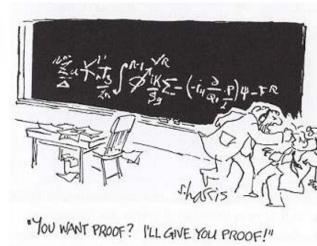


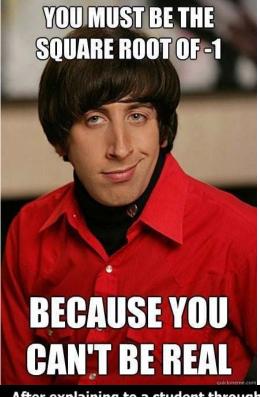
Unfortunately, Brad had neglected to stretch his brain before taking the big algebra midterm.

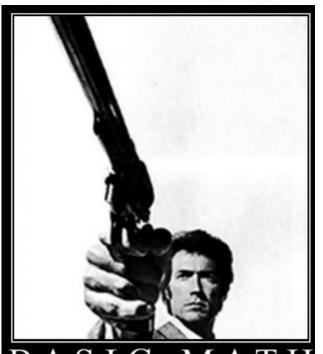


Just for Kicks

An infinite number of mathematicians walk into a bar. The first one orders a beer. The second one, half a beer. The third, a quarter of a beer. The bar man says "uou're all idiots" and pours two beers.







Because the difference between six and five can be very damned important.

After explaining to a student through various lessons and examples that:

$$\lim_{x\to 8}\frac{1}{x-8}=\infty$$

I tried to check if she really understood that, so I gave her a different example. This was the result:

$$\lim_{x \to 5} \frac{1}{x-5} = \infty$$

