BLUE BULLETIN 2

SPECIAL NEWS AND ACHIEVEMENTS

The Department of Statistics and Department of Mathematics and Applied Mathematics at the University of Pretoria will co-host the 2023 Southern Africa Mathematical Sciences Association (SAMSA) conference from 21–24 November 2023, at the Future Africa campus of the university located at Hillcrest, Pretoria.

Congratulations to:
- Abba B. Gumel on being elected Fellow of the American Association for the Advancement of Science (AAAS);
- Tung Le on receiving an NRF C1 rating for the period 2023 to 2028;
- Berge Tsanou on joining the Editorial Board of Frontiers in Applied Mathematics and Statistics as a Review Editor.

RECENT GRADUATES

- PhD: Phindile Dumani (PhD Mathematical Sciences); supervised by Prof Mike Chapwanya.

- MSc:
  – Tatiana Blecher* (MSc Applied Mathematics); supervised by Dr Belinda Stapelberg
  – Khanyisani Maqele (MSc Applied Mathematics); supervised by Prof Jacek Banasiak
  – Michelle Michau* (MSc Mathematics); supervised by Dr Ruaan Kellerman
  – Makoba Mothiba (MSc Applied Mathematics); supervised by Dr Mokhwetha Mabula and Dr Gaza Maluleke.

- Honours:
  – Applied Mathematics: Mariska Genis, Erin Kenyon and Caleb Sindi
  – Mathematics: Ben Victor*
  – Financial Engineering: Bheki Masinga, Natasa Milonas, Sithembiso Ndwandwe, Hannah Newman, Suhail Sidat and Anton van Dyk*.

Note: Names that appear with * above are the names of students that made distinctions.

2022 PRIZE WINNERS

- Dewalt Hattingh book prize (best third year student in the Mathematics or Applied Mathematics programme): Louis Nel.

- SAMS medal prize (for best honours student in the Mathematics or Applied Mathematics programme): Ben Victor.

- Gensec prize (best honours student in the Mathematics of Finance or Financial Engineering programme): Anton van Dyk.

PERSONALIA

BIRTHDAYS IN MARCH
11 - Désirée Moubandjo
13 - Mapundi Banda
13 - Leonie Mostert
15 - Jacek Banasiak
26 - Chris Schwanke
28 - Chigoziem Emereuwa
28 - Baphumelele Nxala

BIRTHDAYS IN APRIL
3 - Bernardo Rodrigues
10 - Kenneth Dukuza

BIRTHDAYS IN MAY
6 - Chimere Anabanti
18 - Daniel Fresen
25 - Maya Thackeray
27 - Herman Ohlhoff
27 - Andriamihaja Ramanantoanina

CONFERENCES, SEMINARS AND WORKSHOPS

- J Banasiak delivered a mini-course titled "Age-structured population models – from Fibonacci to McKendrick-von Foerster models" at the 3MC School on Biomathematics at the African Mathematical School on Mathematical Modeling in Biology held from 20–28 March 2023 at NWU, Potchefstroom.
- J Banasiak delivered a plenary lecture titled "Multiple time scales and long-term dynamics in epidemiological modelling" at the 3MC International Conference on Recent Developments in Mathematical Modeling in Biology held from 29–31 March 2023 at NWU, Potchefstroom.
- J Banasiak will deliver a plenary lecture on the title "Effect of demography on the dynamics of malaria with transmission-blocking drugs" at the Modelling in the context of African Health 2023, a joint conference of UKZN and the CoE-MaSS which will hold from 12–14 April 2023.
- MK Banda is a co-organiser of the 18–22 September 2023 international short course and workshop on "Recent Trends in Optimization and Control", which will hold at the Future Africa Campus of the University of Pretoria.
- M Chapwanya delivered a plenary lecture titled "Design of Mickens' schemes for models in mathematical biology. Application to Ebola Virus Disease" at the 3MC International Conference that held from 29–31 March 2023 at NWU, Potchefstroom.
- M Chapwanya will deliver a plenary lecture on the title "Existence of traveling waves in crop vector borne diseases" at the Modelling in the context of African Health 2023, a joint conference of UKZN and the CoE-MaSS; to hold from 12–14 April.
- S du Toit will give a talk on the title "A nonlinear model for a local linear elastic rod" on 5 April 2023 at the 44th South African Symposium of Numerical and Applied Mathematics (SANUM) which will hold from 3–5 April 2023 at the Department of Mathematics and Applied Mathematics, University of Johannesburg, South Africa.
- K Hohls will give a talk on the title "Existence and properties of solutions of a semi-linear Timoshenko rod model with axial force" on 5 April 2023 at the 44th South African Symposium of Numerical and Applied Mathematics.
- AS Jooste will give a talk on the title "On the zeros of Meixner polynomials" on 4 April 2023 at the 44th South African Symposium of Numerical and Applied Mathematics (SANUM) which will hold from 3–5 April 2023.2
- AS Jooste will attend an international workshop on "Integrable Systems and Orthogonal Polynomials – Numerical and Analytical Perspectives" at AIMS South Africa from 11–15 April 2023.
- M Labuschagne will give a talk on the title "Finite element application to earthquake induced oscillations in vertical structures" on 5 April 2023 at the 44th South African Symposium of Numerical and Applied Mathematics.
- G Manjunath gave a talk on the title "Topological and Statistical Properties of Reservoir Computing Systems" at the Dynamical Systems Seminar organised by Imperial College London on 14 March 2023.
- E Maré will serve as a keynote speaker at the Risk and Uncertainty in Finance and Economics conference scheduled to hold from 4–7 April 2023 at the University of Johannesburg, South Africa.
- BG Rodrigues gave an invited talk titled "2-modular representations of the Conway simple groups as binary codes" at the online Ural Seminar on Group Theory and Combinatorics on 28 February 2023.
- BG Rodrigues will give an invited talk on the title "Partial permutation decoding of the binary code of the projective plane $PG(2, q), q$ even" at the Emerging Perspectives in Mathematics II Workshop from 27 April to 1 May 2023 in Durban.
- B Stapelberg will give a talk on the title "Modal analysis of a new model for earthquake induced oscillations of high-rise vertical structures" on 5 April 2023 at the 44th South African Symposium of Numerical and Applied Mathematics.
- N van Rensburg will give a talk on the title "Spectral theory for linear rod models" on 5 April 2023 at the 44th South African Symposium of Numerical and Applied Mathematics (SANUM) which will hold from 3–5 April 2023.

PUBLICATIONS IN ISI/ACCREDITED JOURNALS

Congratulations to the following colleagues whose articles have been published

- M Chapwanya (with E Kenyon) – *Journal of Biological Systems* 31(1) (2023), 185–213
- M Chapwanya, P Dumani – *Mathematics and Computers in Simulation* 210 (2023), 370–383
- M Chapwanya, J Lubuma, B Tsanou (with Y Terefe) – *Bulletin of Mathematical Biology* 84:136 (2022), 48 pp.
- T Le, BG Rodrigues – *Adv. Math. Commun.* 17(1) (2023), 207–226
- SY Madanha (with A Ballester–Bolinches, R Esteban–Romero, MC Pedraza–Aguilera) – *Bulletin of the Australian Mathematical Society* 107 (2023), 271–275
- E Maré (with A Levendis) – *South African Statistical Journal* 57(1)(2023), 13–25
- BG Rodrigues (with P Mafuta, S Mukwembi) – *Discrete Mathematics* 346(2):113228 (2023), 5 pp.

Congratulations to the following colleagues whose articles have been accepted

- CS Anabanti (with J Schmidt) – *Communications in Algebra*
- J Banasiak (with DW Poka, S Shindin) – *Discrete and Continuous Dynamical Systems – Series S*
- M Chapwanya, P Dumani – *AMS Contemporary Mathematics Series*
- M de Jeu – *Birkhäuser Trends in Mathematics Series*
- M de Jeu, JH van der Walt – *Quaestiones Mathematicae*
- AS Jooste (with K Jordaan) – *Dolomites Research Notes in Approximation*
- SY Madanha – *Journal of Algebra and its Applications*
- G Manjunath (with JP Ortega) – *Physica D: Nonlinear Phenomena (Phys. D)*

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