

# **64th Annual Congress of the South African Mathematical Society** **29 November – 1 December 2021, online**

**Registration and abstract submissions:** For registration, abstract submissions and further information, please visit the congress' website:

<https://samscongress.co.za/>

Abstract submission deadline: **23 September**

Registration deadline: **15 November**

## **Special sessions:**

- Lie symmetries and other approaches in solving nonlinear differential equations
- Functional Analysis and Operator Theory
- Graph theory and Combinatorics (Special session in Honour of Izak Broere)
- Category Theory, Algebra, Topology, Logic (Special session in honour of Hans-Peter Künzi)
- Applied and Numerical Mathematics
- Finite Groups and Combinatorial Structures

Below are the titles and abstracts of two of our five plenary speakers.



## **Doron Lubinsky**

### **Padé approximants**

Pade approximants are named after Henri Eugene Pade, but were invented in a more general form by his supervisor, the famous French mathematician Charles Hermite. Hermite used what are now called Hermite-Pade approximants, to prove that  $e$  is transcendental. Physicists studying scattering theory found them useful in locating singularities of functions in the 20th century. We review them at an introductory level.

## **Fortuné Massamba**

### **Recent developments in locally conformal geometry**

We present some geometrical properties of locally conformal structures in almost Hermitian and almost contact manifolds. The semi-Riemannian case of such manifolds will also be discussed. Among other results, some characteristic theorems are given, and under certain conditions, we prove the existence of Riemannian foliations.

