

S E M I N A R



Prof Christian G. Boehmer  
University College London, UK

**Date:**  
Thursday, 25 April 2024

**Time:**  
12h15-13h15 SAST

- Venue:**
- **NITheCS Seminar Room**  
University of KwaZulu-Natal  
Westville Campus  
3rd Floor, H-Block,  
School of Chemistry and Physics
  - **Online**

**Refreshments will be served.**

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# Dynamical systems in cosmology – theory and applications

**ABSTRACT:**

The talk begins with a general overview of dynamical systems, a well-known field of applied mathematics with a wide range of applications. These techniques can be used for studying the time evolution of infectious diseases or for studying the time evolution of the Universe, this talk will focus on the latter. After rewriting the cosmological field equations using suitable variables, I will show some simple applications first. This is then generalised and expanded to show how these techniques can be applied to various different cosmological models. At the end I discuss new results involving cosmological fluids with boundary term couplings.

*Prof Christian G. Boehmer is the Head of the Department of Mathematics at University College London, UK.*

**WHO SHOULD ATTEND?**

This colloquium talk is intended to be accessible to postgraduate students.

All are welcome!

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