

Otto-von-Guericke-Universität Magdeburg  
Fakultät für Mathematik

Auf Einladung des Institutes für Algebra und Geometrie spricht

Frau Eliana Duarte  
(Universidade do Porto, Portugal)

über das Thema

### **Representation of Context-Specific Causal models**

**Der Vortrag findet dual statt.**

per Zoom Meeting ID 971 4945 5855, passcode 490213 oder G02-210

**Zeit:** Dienstag, 5. April 2022, 13.00 Uhr

Zu diesem Vortrag laden wir alle Interessierten herzlich ein.

Prof. Dr. Thomas Kahle

**Abstract:** In this talk I will introduce a class of discrete statistical models to represent context-specific conditional independence relations for discrete data. These models can also be represented by sequences of context-DAGs (directed acyclic graphs). We prove that two of these models are statistically equivalent if and only their contexts are equal and the context DAGs have the same skeleton and v-structures. This is a generalization of the Verma and Pearl criterion for equivalence for DAGs.

A 3 minute video abstract is available at <https://youtu.be/CccVNRFmR1I>