# Mathematisches Institut der Universität Bayreuth

## Der Geschäftsführende Vorstand
## Prof. Dr. Lars Grüne

D-95440 Bayreuth
Tel.: (0921) 55-3270
Fax: (0921) 55-3238

28. Juni 2017

# Einladung
### zum
# Mathematischen Kolloquium

Am Donnerstag, dem 6. Juli 2017, spricht

**Herr Dr. Janosch Rieger,**
**School of Mathematical Sciences,**
**Monash University, Melbourne, Australia**
**Gast am Lehrstuhl Angewandte Mathematik**
**bei Herrn Prof. Dr. Lars Grüne**

über das Thema

### *Recent advances in domain reconstruction from electrical impedance tomography data*

### Abstract

Electrical impedance tomography is an emerging budget-priced, non-invasive medical imaging technique that is very likely to complement computerised tomography in applications such as pulmonary function control and breast cancer screening in the future. The main difficulty associated with this technology is that the arising inverse problem is strongly ill-posed.

In this talk, I will discuss an alternative approach to domain reconstruction from electrical impedance tomography data, which is based on the concept of the convex source support introduced by Kusiak and Sylvester, as well as an appropriate numerical discretisation of the resulting problem.

**Beginn:** 16.30 Uhr (Kaffee/Tee ab 16.00 Uhr im Seminarraum 748)

**Ort:** Hörsaal H 19, Gebäude Naturwissenschaften II, Universitätsgelände

gez. L. Grüne