



Institut für
Angewandte Mathematik



Leibniz
Universität
Hannover

Institut für Angewandte Mathematik
26.04.2023

Oberseminar Analysis und Theoretische Physik

**Dr. Christian Günther
(Leibniz Universität Hannover)**

Nonlinear Cone Separation Theorems in Real Reflexive Banach Spaces

The separation of two sets (or more specifically of two cones) plays an important role in different fields of mathematics (e.g. variational analysis, convex analysis, convex geometry, optimization). In this talk, we show some new results for the separation of two (not necessarily convex) cones by a (convex) cone / conical surface in real reflexive Banach spaces. We basically follow the separation approach by Kasimbeyli (2010, SIAM J. Optim. 20), which is based on augmented dual cones and Bishop-Phelps type (nonlinear) separating functions. Classical separation theorems for convex sets are the key tool for proving our main nonlinear cone separation theorems.

**Dienstag, 09.05.2023, 15:00 Uhr, Raum c311
Hauptgebäude der Universität**

Veranstalter:

**Prof. Dr. Wolfram Bauer
Prof. Dr. Joachim Escher
Prof. Dr. Johannes Lankeit
Prof. Dr. Elmar Schrohe
Prof. Dr. Christoph Walker**