

14.2.2020

An die Mitglieder des Fachbereichs Mathematik und Statistik - im Hause -

# Vortragsankündigung

Sehr geehrte Damen und Herren,

#### Frau Dr. Hazel Brickhill

wird am

### Donnerstag, 27. Februar 2020 um 15:15 Uhr in Raum F426

einen Vortrag zum Thema

## The Completeness Theorem of First Order Logic

halten.

Alle Interessenten sind herzlich eingeladen.

Der Studiendekan

gez. C. Scheiderer

#### Abstract:

Although less well known than the incompleteness theorems, Gödel's completeness theorem is at the core of mathematical logic. It states that, for any set of formulae in a first order language that is consistent, i.e. from which it is not possible to derive a contradiction, there is a model which makes all these formulae true. This is prime facie surprising, as the existence of a model seems a much stronger claim than mere consistency. I will explain how we can make some of these notions mathematically precise, and give a key idea of the proof. I will finish with an interesting consequence to the completeness theorem known as Skolem's Paradox.