



Einladung zum Oberseminar Mathematische Logik

Julius-Maximilians-Universität Würzburg
Juniorprofessur für Mathematische Logik

Prof. Dr. Helmut Schwichtenberg

(Universität München, Mathematisches Institut)

A theory of computable functions

We work in a constructive extension of classical logic, where in addition to the classical existential quantifier (not – forall – not) we have a constructive one which requires an example. In this setting we sketch a theory of computable functionals (TCF) which extends Heyting's arithmetic in all simple types. TCF includes Kreisel's (modified) realizability predicates and has invariance axioms stating that "to assert is to realize" (Feferman 1978) for realizability-free formulas. Using these TCF proves a soundness theorem: the term extracted from a realizability-free proof of A is a realizer of A. We conclude with some examples in constructive analysis implemented in the Minlog proof assistant.

Ort: Mathematik Ost, Seminarraum 01.003

Zeit: **Dienstag, 26.11.2024 16:15**

Zu diesem Vortrag laden wir Sie herzlich ein.

gez. Anton Freund