



Invitation

Logic Colloquium

Philip Welch

(University of Bristol and Zukunftskolleg – Departments of Mathematics and Philosophy)

Free sets

the talk will take place
on **Monday, 22.05.23** at **15:15** in room **F426**

All interested are welcome to attend

Abstract: A subset of an algebra, or of a structure more generally, is free if none of the elements can be defined over the structure from the rest of them. (Think of a linearly independent set of vectors in a vector space.) Several factors come into play when assessing whether a structure has free sets: the size of the domain, the cardinality of the signature of the structure &c., equivalently, the language being used to describe it. Set theorists are interested in infinite structures and sets, and in particular whether structures can have infinite free sets. We discuss these issues, and shall see that positing an infinite free set for all structures of a particular size is either false, or, depending on the size, requires axioms beyond the usual ones of set theory.

Carolin Antos, Salma Kuhlmann
Coordinators of the Logic Colloquium