

A colloquial talk for professor appointment procedure, **April 10, from 2pm, lecture room M1**

Jan Paseka

Title: Quantales and related structures

Abstract:

In this talk we survey, first, the development in the theory of quantales and quantale-like structures, and, second, the work of Brno quantale research group.

We will start with a definition of a quantale (a complete lattice equipped with an associative binary operation that distributes over arbitrary suprema) and related examples. Then, we will go to the origins of quantale theory. After it, we switch to up-to-date sources of our research – theory of operator algebras, many-valued and non-commutative topologies, computer science, and logic.

In the second part of our talk we will discuss our joint work we have done in this area. We conclude with directions for further research. The talk will be accessible to any graduate student.