## Formal concept analysis and its fuzzifications

## Stanislav Krajči

Institute of Computer Science Faculty of Science Pavol Jozef Šafárik University in Košice

The formal concept analysis is one of the methods of data-mining. It is based on application of the lattice theory. It works with one table, so-called an object-attribute model with homogeneous data. One of its goals is to identify (bi)clusters of objects/attributes. The original approach of Ganter and Wille works mainly with a two-valued matrix hence the question of dealing with a many-valued object-attribute model arises naturally. We show some theoretical aspects of some such fuzzifications of formal concept analysis and possible practical applications of some of them.