Rule induction from data is a type of machine learning especially appropriate for intelligent data analysis and knowledge discovery tasks. In data driven research the methods based on rule learning present an important tool for data interpretation and generation of new hypotheses. The lecture will be jointly given by the authors of the recently published book “Foundations of rule learning” with the intention to promote it as a textbook for a broader community of students and researches from various disciplines including artificial intelligence, computational biology, bio-medicine, social sciences, and economy. The talks will cover the basic rule induction concepts and demonstration of on-going work on semantic data mining and risk modeling.

11.15-11.45 Johannes Fürnkranz

Introduction to rule learning
Keywords: Separate-and-conquer rule learning, covering strategy, rule learning heuristics, coverage space, pruning of rules.

11.45-12.15 Nada Lavrač

Advances in subgroup discovery for biomedical research
Keywords: Subgroup discovery, semantic data mining, biomedical applications

12.15-12.45 Dragan Gamberger

Descriptive modeling in social sciences
Keywords: Features as rule building blocks, data preparation, banking crises domain, risk modeling.