



## *Ph.D. programme in Mathematics and Computer Science*

***Title:*** Applied Artificial Intelligence in Production

***Speaker:*** Kostyantyn Shchekotykhin

***Abstract:*** The course focuses on industrial applications of AI, such as knowledge-based configuration or scheduling. Namely, it covers different knowledge representation and reasoning (KRR) approaches, as constraints satisfaction (MiniZinc language) and answer set programming (ASP-Core-2 language), used to model and solve problems appearing in practice of such companies as Siemens. During the course the students will learn different modelling approaches used to improve performance of modern solvers. Moreover, we will have a look on various solver tuning approaches that showed up to be useful in practice.

***Short Biography:*** Dr. Kostyantyn Shchekotykhin received his MSc degree from Kharkov Polytechnical University, Ukraine and doctoral degree in computer science from Alpen-Adria-University Klagenfurt, Austria. Currently, he is an assistant professor of the Applied Informatics institute at Alpen-Adria-University. His main research interest lies in applications of knowledge-based systems, such as model-based diagnosis of faults, configuration and recommendation of complex products and services, automated acquisition of knowledge bases, intelligent user interfaces as well as interactive debugging of knowledge bases and logic programs.