

## PUBLIC LECTURE EVALUATION

### Masaryk University

<b>Faculty</b>	Faculty of Informatics
<b>Procedure field</b>	Informatics
<b>Applicant</b>	doc. Dr.rer.nat. RNDr. Mgr. Bc. Jan Křetínský, Ph.D.
<b>Lecture date</b>	29. 3. 2022
<b>Lecture topic</b>	<i>A story of checking LTL models</i>
<b>Persons present</b> (number)	41
<b>Designated evaluators</b> (board members)	prof. RNDr. Daniel Král, Ph.D., DSc. prof. RNDr. Jiří Barnat, Ph.D. prof. Mikołaj Bojańczyk, PhD prof. RNDr. Petr Jančar, CSc. prof. RNDr. Jiří Sgall, DrSc.

The public lecture was delivered as a part of the Informatics Colloquium series of the Faculty of Informatics on Tuesday March 29, 2022. Jan Křetínský started his lecture with mentioning motivation for research questions to be addressed during his lecture and then introduced a formalization of these questions using the temporal logic. After a brief history overview, he gave simple examples demonstrating ideas behind the basic concepts of temporal logic and model checking. Next, he presented earlier results in the linear temporal logic model checking and their relation to automata theory. He then discussed two particular ways how to improve on the existing results in the area – LTL synthesis and statistical model checking – that he discussed in detail in the remainder of his lecture. The lecture concluded with an overview of the concepts presented in the lecture.

The lecture was delivered with confidence in a way, which demonstrated a good knowledge of the field by Jan Křetínský and his enthusiasm for the research problems that he has been working on. While keeping a good technical level, Jan Křetínský managed to make the lecture broadly accessible. He also included a couple of well-thought jokes to keep the audience fresh while following the lecture. There was a brief discussion after the lecture showing the interest of the audience in the presented results.

## Conclusion

The lecture delivered by Jan Křetínský, entitled „A story of checking LTL models“ and delivered as part of the professor appointment procedure **demonstrated** sufficient scholarly qualifications and pedagogical capabilities expected of applicants participating in a professor appointment procedure in the field of Informatics.

Date: 29. 3. 2022

Daniel Král

Jiří Barnat

Mikołaj Bojańczyk

Petr Jančar

Jiří Sgall



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