



# Simona Kašterović

## Curriculum Vitae

### Education

- 2017–Present **PhD in Applied Mathematics**, *Faculty of Technical Sciences*, University of Novi Sad.
- 2015–2017 **Masters of Applied Mathematics**, *Faculty of Technical Sciences*, University of Novi Sad, GPA: 9.78 (max. 10).
- 2011–2015 **Bachelor with Honours in Mathematics Teaching**, *Department of Mathematics and Informatics, Faculty of Sciences*, University of Novi Sad, GPA: 9.42 (max. 10).

### Master's thesis

- Title *Kripke semantics for intuitionistic logic and lambda calculus*  
Supervisor Professor Silvia Ghilezan

### Work Experience

- 2016–Present **Teaching assistant**, *Faculty of Technical Sciences*, University of Novi Sad.  
Theoretical and Applied Mathematics
- 2015–2016 **Mathematics Teacher**, *High school*, Bijeljina, Bosnia and Herzegovina.

### Research Visits

- 2019 **University of Ljubljana**, *Faculty of Mathematics and Physics*, Duration: March 23-30, 2019, Host: Alex Simpson.  
The short-term scientific mission (STSM) supported by the COST Action CA15123 EUTypes
- 2018 **University Paris-Diderot (Paris 7)**, *L'Institut de Recherche en Informatique Fondamentale (IRIF)*, Duration: May 1 - July 31, 2018, Working under the supervision of Michele Pagani.  
Mobility programme supported by Erasmus+ EU

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## Summer/Winter schools

- 2022 1st Dedukti school, June 24 - 25, 2022, Nantes, France
- 2022 Linear Logic Winter School, January 24 - 28, 2022, Marseille, France
- 2019 EUTypes summer school 2019, Types for Programming and Verification, August 30-September 4, 2019, Ohrid, Macedonia.
- 2019 ESSLLI 2019 - 31st European Summer School in Logic, Language and Information, August 5-16, 2019, Riga, Latvia.
- 2018 EUTypes Summer School, Types for Programming and Verification, August 8-12, 2018, Ohrid, Macedonia.
- 2017 EUTypes Summer School, Types for Programming and Verification, July 10-14, 2017, Ohrid, Macedonia.

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## Talks

- 2023 **Probabilistic Reasoning about Typed Combinatory Logic**: World Logic Day 2023, January 13-14, 2023, Zagreb, Croatia
- 2022 **Probabilistic Reasoning about Typed Combinatory Logic**: LAP 2022, 11th Conference on Logic and Applications, September 26-30, 2022, Dubrovnik, Croatia
- 2022 **Probabilistic reasoning in computation and type theory**: Women in Euro-ProofNet, June 24, 2022, Nantes, France
- 2022 **Towards Probabilistic Reasoning about Typed Combinatory Terms**: TYPES 2022 - 28th International Conference on Types for Proofs and Programs, June 20-25, 2022, LS2N, University of Nantes, France
- 2022 **Crypto-Covid: Privacy challenges in BlockChain and Contact Tracing**: AI Seminar, May 25, 2022, Mathematical Institute SANU, Belgrade, Serbia
- 2021 **Towards Logic of Combinatory Logic**: LAP 2021 - 10th Conference on Logic and Applications, September 20-24, 2021, Dubrovnik, Croatia.
- 2020 **Kripke-style semantics for Full Simply Typed Lambda Calculus**: LAP 2020 - 9th Conference on Logic and Applications, September 21-25, 2020, Dubrovnik, Croatia.
- 2020 **Towards Completeness of Full Simply Typed Lambda Calculus**: TYPES 2020 - 26th International Conference on Types for Proofs and Programs, March 2020, Turin, Italy.
- 2020 **Towards probabilistic reasoning in type theory - the intersection type case**: 11th International Symposium (FOLKS 2020), February 17-21, 2020, Dortmund, Germany
- 2019 **Kripkeove semantike za lambda račun sa parovima i disjunktним sumama (Kripke semantics for lambda calculus with pairs and disjoint sums)**: Kongres mladih matematičara (Congress of Young Mathematicians), October 3-5, 2019, Novi Sad, Serbia.
- 2019 **Kripke semantics for lambda calculus with pairs and disjoint sums** : 7th Conference on Logic and Applications, September 23-27, 2019, Dubrovnik, Croatia.

- 2019 **The Discriminating Power of the Let-In Operator in the Lazy Call-by-Name Probabilistic  $\lambda$ -Calculus**: 4th International Conference on Formal Structures for Computation and Deduction (FSCD 2019), June 23-30, 2019, Dortmund, Germany.
- 2019 **Probabilistic reasoning in lambda calculus**: Seminar for foundations of mathematics and theoretical computing, March 28, 2019, University of Ljubljana, Slovenia.
- 2018 **Towards probabilistic testing of lambda terms**: 7th Conference Logic and Applications-LAP, September 22-28, 2018, Dubrovnik, Croatia
- 2018 **Probabilistic reasoning about typed lambda terms**: 24th Conference on Types for Proofs and Programs-TYPES, June 18-21, 2018, Braga, Portugal.
- 2017 **Towards probabilistic reasoning about simply typed lambda terms**: 7th Conference Probabilistic Logic and Applications, November 8, 2017, Belgrade, Serbia.
- 2017 **Probabilistic reasoning with lambda terms**: 6th Conference Logic and Applications-LAP, September 18-22, 2017, Dubrovnik, Croatia.

## Publications

- Silvia Ghilezan, Luigi Liquori, Bojan Marinković, Simona Kašterović, Zoran Ognjanović, Tamara Stefanović, Federating Digital Contact Tracing using Structured Overlay Networks. ComSIS – Computer Science and Information Systems, Volume 19, Issue 3, Pages: 1261-1282 (2022)
- Simona Kašterović, Silvia Ghilezan. Kripke semantics and completeness for full simply typed lambda calculus. Journal of Logic and Computation Volume 30, issue 8: 1567-1608 (2020)
- Silvia Ghilezan, Jelena Ivetic, Simona Kasterovic, Zoran Ognjanovic, and Nenad Savic. Towards probabilistic reasoning in type theory - the intersection type case. In Foundations of Information and Knowledge Systems - 11th International Symposium, FoKS 2020, Dortmund, Germany, February 17-21, 2020, Proceedings, pages 122–139, 2020
- Simona Kasterovic and Michele Pagani. The Discriminating Power of the Let-In Operator in the Lazy Call-by-Name Probabilistic  $\lambda$ -Calculus. In Herman Geuvers, editor, 4th International Conference on Formal Structures for Computation and Deduction (FSCD 2019), volume 131 of Leibniz International Proceedings in Informatics (LIPIcs), pages 26:1–26:20, Dagstuhl, Germany, 2019. Schloss Dagstuhl-Leibniz-Zentrum für Informatik.
- Silvia Ghilezan, Jelena Ivetic, Simona Kasterovic, Zoran Ognjanovic, and Nenad Savic. Probabilistic reasoning about simply typed lambda terms. In Logical Foundations of Computer Science - International Symposium, LFCS 2018, Deerfield Beach, FL, USA, January 8-11, 2018, Proceedings, pages 170–189, 2018.