

# Christina Vasilakopoulou

## EMPLOYMENT

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Sep 2022 – now	<b>National Technical University of Athens</b> Assistant Professor, School of Applied Mathematical and Physical Sciences, Department of Mathematics
Jun 2019 – Aug 2022	<b>University of Patras, Greece</b> Researcher, Department of Mathematics
Oct 2017 – June 2019	<b>University of California at Riverside (USA)</b> Visiting Assistant Professor, Department of Mathematics
Oct 2016 – Sep 2017	<b>Université Libre de Bruxelles (Belgium)</b> Postdoctoral Fellow, Department of Mathematics
Oct 2015 – Jun 2016	<b>Massachusetts Institute of Technology (USA)</b> Postdoctoral Associate, Department of Mathematics
May – Sep 2015	<b>Athens University of Economics and Business (Greece)</b> Postdoctoral Researcher, Department of Informatics
Sep 2014 – Feb 2015	<b>University of Hawaii at Manoa (USA)</b> Postdoctoral Research Fellow, Department of Information and Computer Sciences

## EDUCATION

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2010 – 2014	<b>University of Cambridge (UK) – PhD in Category Theory</b> Supervisors: Martin Hyland, Ignacio Lopez Franco
2009 – 2010	<b>University of Cambridge (UK) – MAsT in Mathematics</b>
2005 – 2009	<b>University of Patras (Greece) – Ptychion in Mathematics (B.Sc.)</b> Direction: Pure Mathematics, Final mark: 9,26/10 “Excellent”

## PAPERS

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2022	John C. Baez, Kenny Courser and Christina Vasilakopoulou, <i>Structured versus Decorated Cospans</i> , <i>Compositionality</i> (3) 4
2022	Nicola Gambino, Richard Garner and Christina Vasilakopoulou, <i>Monoidal Kleisli Bicategories and the Arithmetic Product of Coloured Symmetric Sequences</i>
2021	Mitchell Buckley, Timmy Fieremans, Christina Vasilakopoulou and Joost Verduyn, <i>Oplax Hopf Algebras</i> , <i>Higher Structures</i> 5, no. 1, 71–120
2021	Mitchell Buckley, Timmy Fieremans, Christina Vasilakopoulou and Joost Verduyn, <i>A Larson-Sweedler Theorem for Hopf V-categories</i> , <i>Advances in Mathematics</i> 376
2021	Georgios Bakirtzis, Cody H. Fleming and Christina Vasilakopoulou, <i>Categorical Semantics of Cyber-Physical Systems Theory</i> , <i>ACM Transactions on Cyber-Physical Systems</i> (3) 5, 1–32
2020	Joe Moeller and Christina Vasilakopoulou, <i>Monoidal Grothendieck Construction</i> , <i>Theory and Applications of Categories</i> 35, no. 31, 1159–1207
2020	Georgios Bakirtzis, Christina Vasilakopoulou and Cody H. Fleming, <i>Compositional Cyber-Physical Systems Modeling</i> , <i>ACT 2020</i> , <i>Electronic Proceedings in Theoretical Computer Science</i>
2020	Ignacio López Franco and Christina Vasilakopoulou, <i>Duoidal categories, measuring comonoids and enrichment</i>
2020	Patrick Schultz, David Spivak and Christina Vasilakopoulou, <i>Dynamical Systems and Sheaves</i> , <i>Applied Categorical Structures</i> 28, no.1, 1–57.
2019	Christina Vasilakopoulou, <i>Enriched duality in double categories: V-categories and V-cocategories</i> , <i>Journal of Pure and Applied Algebra</i> 223, no. 7, 2889–2957
2018	Christina Vasilakopoulou, <i>On Enriched Fibrations</i> , <i>Cahiers de Topologie et Géométrie Différentielle</i> , (4) 50, 354–387
2017	Martin Hyland, Ignacio Lopez Franco and Christina Vasilakopoulou, <i>Hopf measuring comonoids and enrichment</i> , <i>Proceedings of the London Mathematical Society</i> , (3) 115, 1118 – 1148
2017	Martin Hyland, Ignacio Lopez Franco and Christina Vasilakopoulou, <i>Measuring comodules and enrichment</i>

- 2017 Patrick Schultz, David Spivak, Christina Vasilakopoulou and Ryan Wisnesky, *Algebraic Databases*, Theory and Applications of Categories, volume 32, pages 547 – 619
- 2016 Vasilis Spyropoulos, Christina Vasilakopoulou and Yannis Kotidis, *Degree: A Middleware for Distributed Graph Pattern Matching*, Proceedings of the IEEE Big Data Workshop on Methods to Manage Heterogeneous Data and Polystore Systems, Washington D.C., Dec 2016
- 2014 Christina Vasilakopoulou, *Generalization of Algebraic Operations via Enrichment*, PhD thesis
- 2012 Christina Vasilakopoulou, *Enrichment of Categories of Algebras and Modules*

## SELECTED TALKS

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- 2023 Topos Institute Colloquium (online)  
Talk: **Dual algebraic structures and enrichment**
- 2022 Virtual Double Categories Workshop (online)  
Talk: **Monoidal Kleisli double categories**
- 2020 Algebra seminar at Masaryk University, Brno, Czech Republic (online)  
Talk: **Oplax Hopf Algebras**
- 2020 Colloquium of Department of Mathematics, Macquarie University, Australia  
Also in European Centre for Living Technology Seminar, University of Venice, Italy (2019)  
Talk: **Wiring diagrams, a categorical formalism for systems modeling**
- 2019 Fifth Symposium on Compositional Structures, University of Birmingham, UK  
Talk: **The Dialectica category and related structures**
- 2018 Riverside Mathematics Workshop for Excellence and Diversity, UCR, USA  
Talk: **Hopf and Frobenius algebras: generalizations and the Larson-Sweedler Theorem**
- 2018 CT2018 (International Category Theory Conference), University of Azores, Portugal  
Talk: **Monoidal Grothendieck Construction**
- 2017 AMS Meeting, Special Session on Applied Category Theory, UCR, USA  
Talk: **Abstract Dynamical Systems**
- 2017 CT2017, UBC, Vancouver, Canada  
Talk: **Hopf categories as Hopf monads in enriched matrices**
- 2014 CT2014, University of Cambridge, UK  
Talk: **Enriched Fibration**
- 2013 CT2013, Macquarie University, Sydney  
Talk: **Enrichment of V-categories in V-cocategories**

## EXPERIENCE, AWARDS & MISCELLANEOUS

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- 2023 Chair of the Scientific committee: ACT2023, University of Florida, Miami, USA
- 2023 Organizing committee: PSS107, National Technical University of Athens, Greece
- 2021 Scientific committee: CT2021, University of Genova, Italy
- 2020 Steering & program committee: ACT2020, MIT, USA, 6-10 July
- 2017–2019 Primary instructor of ‘Intro to College Mathematics for Business and Social Sciences’, ‘Intro to College Mathematics for Sciences II’, ‘Calculus for Life Sciences II’, ‘First Year Calculus I, II’ and ‘Calculus of Several Variables I’, Department of Mathematics, UCR
- 2019 Outstanding Teaching Award, Department of Mathematics, UCR, USA
- 2019 Steering & Scientific committee: ACT2019, University of Oxford, UK, 15-19 July
- 2019 Organizing committee: CT2019, University of Edinburgh, UK, 7-13 July
- 2019 Advisor for Statebox visual programming language using category theory and Petri nets
- 2017 Organizing committee: *Brussels Hopf Algebra workshop*, ULB, 29-30 August
- 2016 Teaching assistant for graduate course *Category Theory*, ULB
- 2014 Selected participant, *Kan Extension Seminar*, blog post
- 2010 – 2014 Supervisor (teaching assistant) for undergraduate courses *Groups (Part IA)* and *Groups, Rings and Modules (Part IB)*, University of Cambridge, UK
- 2009 – 2014 George and Marie Vergotis Bursary (Cambridge Trusts), A.G.Leventis Foundation Scholarship, Internal Graduate Studentship (Trinity College), Propondis Foundation Scholarship
- 2005 – 2009 Scholarships of entrance (1st) and performance (1st), Department of Mathematics, University of Patras, Greece – Institution of Government Scholarships (IKY)