

Brief Curriculum Vitae

Name **Vasilakopoulou Christina**
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EMPLOYMENT

Jun 2019 – now **University of Patras, Greece**
Researcher, Department of Mathematics
PI of research grant “Duality and enrichment in operadic theory; interactions with Hopf structures and abstract machines modeling”, H.F.R.I. (ΕΛΙΔΕΚ)

Oct 2017 – June 2019 **University of California at Riverside (USA)**
Visiting Assistant Professor, Department of Mathematics

Oct 2016 – Sep 2017 **Université Libre de Bruxelles (Belgium)**
Postdoctoral Fellow, Department of Mathematics

Oct 2015 – Jun 2016 **Massachusetts Institute of Technology (USA)**
Postdoctoral Associate, Department of Mathematics

May – Sep 2015 **Athens University of Economics and Business (Greece)**
Postdoctoral Researcher, Department of Informatics

Sep 2014 – Feb 2015 **University of Hawaii at Manoa (USA)**
Postdoctoral Research Fellow, Department of Information and Computer Sciences

EDUCATION

2010 – 2014 **University of Cambridge (UK) – PhD in Category Theory**
Supervisors: Martin Hyland, Ignacio Lopez Franco
Thesis title: “Generalization of algebraic operations via enrichment”

2009 – 2010 **University of Cambridge (UK) – MAsT in Mathematics**

2005 – 2009 **University of Patras (Greece) – Ptychion in Mathematics (B.Sc.)**
Direction: Pure Mathematics, Final mark: 9,26/10 “Excellent”

PAPERS

To appear Mitchell Buckley, Timmy Fieremans, Christina Vasilakopoulou and Joost Verduyn Lunel, *A Larson-Sweedler Theorem for Hopf V-categories*, *Advances in Mathematics*

To appear Mitchell Buckley, Timmy Fieremans, Christina Vasilakopoulou and Joost Verduyn Lunel, *Oplax Hopf Algebras*, *Higher Structures*

2020 Joe Moeller and Christina Vasilakopoulou, *Monoidal Grothendieck Construction*, *Theory and Applications of Categories* 35, no. 31, 1159–1207

2020 Georgios Bakirtzis, Christina Vasilakopoulou and Cody H. Fleming, *Compositional Cyber-Physical Systems Modeling*, *ACT 2020, Electronic Proceedings in Theoretical Computer Science*

2020 Ignacio López Franco and Christina Vasilakopoulou, *Duoidal categories, measuring comonoids and enrichment*

2020 Patrick Schultz, David Spivak and Christina Vasilakopoulou, *Dynamical Systems and Sheaves*, *Applied Categorical Structures* 28, no.1, 1–57.

2019 Christina Vasilakopoulou, *Enriched duality in double categories: V-categories and V-cocategories*, *Journal of Pure and Applied Algebra* 223, no. 7, 2889–2957

2018 Christina Vasilakopoulou, *On Enriched Fibrations*, *Cahiers de Topologie et Géométrie Différentielle*, (4) 50, 354–387

2017 Martin Hyland, Ignacio Lopez Franco and Christina Vasilakopoulou, *Hopf measuring comonoids and enrichment*, *Proceedings of the London Mathematical Society*, (3) 115, 1118 – 1148

2017 Martin Hyland, Ignacio Lopez Franco and Christina Vasilakopoulou, *Measuring comodules and enrichment*

2017 Patrick Schultz, David Spivak, Christina Vasilakopoulou and Ryan Wisnesky, *Algebraic Data-bases*, *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

- 2020 Algebra seminar at Masaryk University, Brno, Czech Republic (online)
Talk: **Oplax Hopf Algebras**
- 2020 Australian Category Seminar at Macquarie University, Sydney, Australia
Talk: **Sweedler theory for duoidal categories**
- 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**
- 2015 Information Systems and Databases Laboratory seminar, AUEB, Greece
Talk: **Introduction to Category Theory**
- 2014 CT2014, University of Cambridge, UK
Talk: **Enriched Fibration**
- 2014 Quantum Group, Department of Computer Science, University of Oxford, UK
Talk: **Adjunctions between Fibrations and Enrichment**
- 2013 CT2013, Macquarie University, Sydney
Talk: **Enrichment of V-categories in V-cocategories**

EXPERIENCE, AWARDS & MISCELLANEOUS

- 2020 Steering & program committee: ACT2020, MIT, USA, 6-10 July
- 2020 Scientific committee: CT2020, University of Genova, Italy (postponed to 2021)
- 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 for ACT2019, University of Oxford, UK, 15-19 July
- 2019 Organizing committee for CT2019, University of Edinburgh, UK, 7-13 July
- 2019 Advisor for Statebox visual programming language using category theory and Petri nets
- 2018 Advisor for Conexus data management platform using Categorical Query Language (CQL)
- 2017 Organizing committee for *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
- 2014 STEP exams marker, University of Cambridge, UK
- 2010 – 2014 A.G.Leventis Foundation Scholarship, Internal Graduate Studentship (Trinity College, Cambridge), Propondis Foundation Scholarship
- 2009 – 2010 George and Marie Vergotis Bursary, Cambridge Trusts
- 2005 Scholarship of entrance (1st) into the Department of Mathematics, University of Patras, Greece – Institution of Government Scholarships (IKY)