

# Curriculum Vitæ

last updated October 9, 2017

## PERSONAL DETAILS



FOSCO LOREGIAN



May 23, 1987



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## CURRENT POSITION

**Post-doc**

*Masaryk University, Brno*

Mar 2017 | now

## EDUCATION

**Postdoctoral fellow and assistant professor**

*University of Western Ontario*

AUG 2016 | Nov 2016

**Ph.D. in Mathematics**

*SISSA – Trieste, Italy*

OCT 2012 | JUN 2016

**M.Sc. in Mathematics**

*Università degli studi di Padova | Padua, Italy*

OCT 2010 | JUL 2012

**B.Sc. in Mathematics**

*Università degli studi di Padova | Padua, Italy*

JAN 2008 | OCT 2010

## RESEARCH INTERESTS

Category theory applied to algebra, geometry and physics.

## THESES

**PhD thesis | *t-structures in stable  $\infty$ -categories***

JUN 2016

*supervisor: D. FIORENZA, Università degli Studi di Roma “La Sapienza”, ITALY*

I re-enact the classical theory of *t-structures* reducing the classical definition to a primitive categorical notion: suitable *reflective factorization systems*, called *normal torsion theories*.

**Master thesis | *Orlov’s reconstruction theorem***

JUL 2012

*F. BOTTACIN, Università degli studi di Padova, ITALY*

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## SUPERVISOR ACTIVITY

**Giovanni Ronchi**

SEP 2016

*Adjoint Functors* | Università di Bologna

B.Sc. in Mathematics | coadvisor | <http://amslaurea.unibo.it/id/eprint/11447>

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## PUBLICATIONS

**Homotopical Algebra is not concrete, I**

APR 2017

with I. DI LIBERTI (MUNI) | accepted in *Journal of Homotopy and related Structures*

***t*-structures are normal torsion theories**

AUG 2014

with D. FIORENZA | *Applied Categorical Structures* (2014), pp. 1-28.

## PREPRINTS

**Factorization systems on (stable) derivators**

MAY 2017

with S. Virili (Murcia) | <https://arxiv.org/abs/1705.08565>

**Recollements in stable  $\infty$ -categories**

AUG 2015

with D. FIORENZA | <http://arxiv.org/abs/1507.03913>

**Hearts and Postnikov towers in stable  $\infty$ -categories**

JAN 2015

with D. FIORENZA | <http://arxiv.org/abs/1501.04658>

**This is the co/end, my only co/friend**

JAN 2015

<http://arxiv.org/abs/1501.02503>

## IN PREPARATION

**Localization theory for derivators**

j/w. M. Groth and S. Virili

**Locally presentable and accessible derivators**

j/w. J. Rosický and S. Virili

**Coend calculus in  $\infty$ -categories**

j/w. F. Genovese (Bonn)

**Sober Ontic Structural Realism and Yoneda lemma**

in preparation for SILFS 2017, Bologna – Italy

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## TALKS AND CONFERENCES

### Homotopical algebra is not concrete

Contributed talk | [BTM 2017](#) Leicester (UK)

SEP 2017

### The formal category theory of derivators

Invited speaker | [STA 2017](#) Prague (CZ)

SEP 2017

### Sober Ontic Structural Realism

Invited speaker | [SILFS 2017](#) Bologna (Italy)

JUN 2017

### Model categories

Invited speaker | ‘A categorical day in Turin’ [CdTO](#), Torino (Italy)

MAY 2017

### *t*-derivators

Invited speaker | ‘Conference for Young researchers in homotopy theory and categorical structures’ [CYRhtCS](#), Bonn (Germany)

FEB 2017

### Coend calculus

Invited by N. Gambino (Leeds). Series of lectures on [arXiv:1501.02503](#)

MAY 2016

### Simplicial Presheaves and Derived Algebraic Geometry

Lectures on  $\mathcal{D}AG$  following Töen’s book

OCT 2015

### Categorical Resolutions of singularities, categorically

Two lectures on Kuznetsov-Lunts’ [arXiv:1212.6170](#).

JAN 2015

### For the sake of well-completeness

Opening short-seminars of [ct2014](#), Cambridge (UK)

JUN 2014

### How I learned to love the first quadrant

A gentle intro to the Serre spectral sequence, with examples and computations

MAY 2014

### It’s turtles all the way down

A (not so) gentle introduction to higher category theory

MAY 2014

### Homotopical interpretation of stack theory

following Joyal-Tierney

APR 2013

### Homotopical algebra for $C^*$ -algebras

following O. Uuye’s [arXiv:1011.2926](#) and A. Østvær

DEC 2012

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## REVIEWING SERVICES

*Reviewer for*      zbMath

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## TEACHING & ORGANIZATIONAL ACTIVITIES

### Elements of Finite Mathematics

*Techniques of counting, probability, discrete and continuous random variables.*

### Homotopical Algebra

*A bottom-up introduction to the language of Homotopical Algebra.*

### Kan Extension Seminar I

*An webinar and online Category Theory reading course. Each of the twelve participants composed a blog post for the n-Category Café <https://golem.ph.utexas.edu/category/> over the course of the first six months of 2014, which has been published every other week. The other participants commented and interacted together, often creating stimulating discussions.*