



I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Matematica Federigo Enriques**

Scientist- in - charge: Amnon Neeman

**Samuel Lavenir**

## CURRICULUM VITAE

### PERSONAL INFORMATION

Surname	Samuel
Name	Lavenir

### PRESENT OCCUPATION

Appointment	Structure
PhD student	EPFL, Lausanne

### EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
PhD in Homotopy theory	In progress	EPFL, Lausanne	2024 (expected)
Master in Pure Mathematics	completed	UPMC, Paris	2019
Bachelor degree	completed	Ecole Polytechnique	2018

### INVITED TALKS

Date	Title	Event	City
October 2023	Persistent rational homotopy theory	GDR homotopy theory and applications	Lille, France
June 2023	The interval sphere model structure	Persistence, sheaves and homotopy theory (online seminar)	online
May 2023	A generalized Hilton-Milnor theorem	2nd International conference in homotopy type theory	Pittsburgh, US



April 2023	Hilton-Milnor's theorem in higher topoi	Paris 13 Topology and Geometry seminar	Villetaneuse, France
March 2023	Homotopy theory in higher categories	EPFL Topology seminar	Lausanne, Switzerland

## ORGANISED EVENTS

Name	Description	City
Young Topologists Meeting 2023	170 participants, 40 students talks and 2 lecture series (Summer 2023)	EPFL, Lausanne
Seminar on toposic Galois theory	local seminar at EPFL, 10 participants (Spring 2023)	EPFL, Lausanne
Seminar on localization theory in higher categories	Local seminar at EPFL, 6 participants (Spring 2022)	EPFL, Lausanne
Seminar on homotopy type theory	Local seminar at EPFL, 12 participants (Fall 2021)	EPFL, Lausanne

## FOREIGN LANGUAGES

Languages	level of knowledge
French	Mother language
English	Bilingual
German	Casual

## TEACHING EXPERIENCE

Teaching assistant in mathematics at EPFL, Lausanne (2020-2024) Courses supervised : Topology (Bachelor), Homotopy theory (Master), Homotopical algebra (Master)
Advisor for Master and Bachelor theses at EPFL (2020-2024) 4 Master projects and 2 Bachelor theses supervised
Research stay at IMM, Marseille (2019) Master thesis supervised by Dimitri Ara on the geometry of orientals and strict omega-categories
Research stay at Courant Mathematical Institute, NYU, New York (2018) Research project with Robert Young on hyperbolic groups and CAT spaces
Teaching assistant in physics at Lycée Henri IV, Paris (2016-2017) Weekly physics tutorials for students preparing the french national examinations
Personal tutor in London (2013) Private tutoring in mathematics for students in high school



## CONGRESSES AND SEMINARS

Date	Title	Place
October 2023	GDR homotopy theory and applications	Lille, France
September 2023	Fall school on K-theory and redshift	Mainz, Germany
July 2023	Young Topologists Meeting 2023	Lausanne, Switzerland
May 2023	2nd International conference on HoTT	Pittsburgh, US
April 2023	Workshop in Univalent Foundations	Vienna, Austria
January 2023	Chromatic homotopy, K-theory and functors	Luminy, France
July 2022	Young Topologists Meeting 2022	Copenhagen, Denmark
June 2022	Barcelona conference on higher structures	Barcelona, Spain
April 2022	5th Workshop in categorical algebra	Gargnano, Italy
January 2022	Logic and higher structures	Luminy, France
October 2021	GDR homotopy theory and applications	Strasbourg, France

## PUBLICATIONS

Articles in reviews
Hilton-Milnor's theorem in infinity-topoi, submitted to Bulletin of the London Mathematical Society, 2023

Preprints
Persistent k-minimal models and the interval sphere model structure, joint with Kathryn Hess and Kelly Maggs, 2023, ArXiv preprint available online
Fiberwise cellularization in infinity-topoi, 2023, preprint available upon request
Cellularization functors in stable infinity-categories (in preparation, draft available upon request)
Strict omega-categories and the geometry of orientals (Master thesis), 2019, available upon request

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: Lausanne, 04/01/2024