

Shaula FIORELLI

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PERSONAL INFORMATION

Date of birth : May 19, 1981. Nationalities : Swiss and Italian.

EDUCATION

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| 2009 | Ph.D. in mathematics , under the direction of Dr. T. Vust
Université de Genève, Section de mathématiques |
| 2004 | Master in mathematics
Université de Genève, Section de mathématiques |

EMPLOYMENT

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| Since 2018 | Université de Genève, NCCR SwissMAP
Senior research associate – Outreach Officer and co-director of Mathscope |
| 2014 – 2018 | Université de Genève, NCCR SwissMAP
Research associate – Communication Officer and co-director of Mathscope |
| Since 2010 | Fondation L'Enseignement mathématique
Scientific secretary |
| 2010 – 2014 | Université de Genève, Section de mathématiques
Research associate |
| 2004 – 2009 | Université de Genève, Section de mathématiques
Assistant |

INSTITUTIONAL RESPONSIBILITIES

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| Since 2018 | Member of Equal opportunities committee of NCCR SwissMAP |
| Since 2014 | Co-director of Mathscope |

ORGANISATION OF CONFERENCES

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| 2021 | ICMP 2021 – International congress of mathematical physics, Genève, 02-07.08.2021
Coordination of Human Rights Session |
| 2020 | L'art des maths – Colloque Wright pour la science, Genève, 02-06.11.2020
Coordination of activities for the public |
| 2017 – 2018 | Colloque EMF2018 of Espace Mathématique Francophone, Paris, 22-26.10.2018
Scientific committee of Activités et Manifestations |
| 2015 | Les secrets de la gravitation – 100 ans de relativité générale , Genève, 24-27.11.15
Organisation and coordination of public lectures |
| 2014 – 2015 | Colloque EMF2015 of Espace Mathématique Francophone, Alger, 10-15.10.15
Organization and animation of outreach activities on the USTHB campus |
| 2010 – 2012 | Colloque EMF2012 of Espace Mathématique Francophone, Genève, 3-7.02.12
Scientific committee of working group on popularization of mathematics |

OUTREACH ACTIVITIES

- 2015 Creation and launch of the **Mathscope**, the mathematics laboratory of the **Sciencescope UNIGE**, in collaboration with Dr. Pierre-Alain Cherix.
Scientific discovery laboratory welcoming classes and groups from the age of 4 for workshops allowing the experimentation of mathematics through playful activities. A team of about fifteen mediators animate these activities.
Since its opening, Mathscope welcome more than 25'000 visitors (April 2022).

Workshop for schools

- Since 2018 **Women and Girls in Science and Technology** coordinated by CERN, Sciencescope UNIGE and EPFL, presentations in classrooms — annual
- Since 2018 **Ateliers mobiles** of Ville de Genève, after-school activities — semestrial
- Since 2013 **TecDays** of Swiss Academy of Engineering Sciences (SATW), workshops day in Secondary II schools — semestrial
- 2011 – 2020 **Projects *Apprivoisez le hasard!*** and ***Symétries*** of Swiss Mathematical Society (SMS), creation and animations of workshops in Secondary I and II classes

Participation in fairs and events

- 2021
on line **Café de l'histoire** organised by Maison de l'histoire and Payot bookstore — 11.10.21
Debate animated by Shaula Fiorelli and Martin Roch (Humanities, UNIGE) around the book *Énigmes mathématiques au temps de Charlemagne* in presence of the two authors
- 2019 **Léonard de Vinci à Genève?** organised by Bibliothèque de Genève — 01-02.03.19
Round table and fair around *De divina proportione* of Luca Pacioli
- Since 2018 **Nuit antique** organised by Faculty of Humanities, UNIGE — biennial
- Since 2018 **Hérisson sous gazon**, fair for children, Charrat, Valais — biennial
- Since 2018 **Nuit des musées**, organised by Ville de Genève — annual
- Since 2013 **Expanding your Horizons**, fair for girls from 11 to 14 years old — biennial
- Since 2006 **Nuit de la science**, organised by Musée d'histoire des sciences, Genève — biennial

On stage

- Season
2021-2022 Creation of **Contes spontanés Science** at Théâtre le Caveau, Genève
collaboration between Christian Baumann, actor, and the Sciencescope
Coordination for the Sciencescope and occasional participation during the show.
- 2021 One-woman mathematical show at **festival Puplinge-les-bains** — 17.08.21
Creation of a one-hour long show on mathematics
- 2019 Creation of the interactive theatre piece **Mystère au Manoir Moutarde**
written by Fathi Ben Arbi and performed by Sciencescope staff as part of the event *Et si j'étais un scientifique ?* of Département de l'instruction publique genevoise
13 shows for Geneva schools (about 2'600 students) — Jan. to March 2019
2 public shows at Globe of CERN — 28.11.19

Exhibitions

- 2021 Contribution to the of exhibition **Plongée dans le monde infini des fractales**
Salle d'exposition de l'UNIGE, Genève — 17.05.21 – 30.07.21
- 2020 Creation of the exhibition **Belles maths – Beautiful maths**
in collaboration with J. Mailler et E. Raphael
On line – Web site of the Colloque Wright 2020, Genève — 02.11.20 – 06.11.20
Salle d'exposition de l'UNIGE, Genève — 17.05.21 – 30.07.21

- 2019 Creation of the exhibition *Leonardo en perspective*
in collaboration with J. Mailler, with founding support of an Agora scheme
Salle d'exposition de l'UNIGE, Genève — 18.12.19 – 20.02.20
- 2012 Creation of the exhibition *Les Jeux sont faits! Hasard et probabilités*
in collaboration with Dr. P.-A. Cherix
Musée d'histoire des sciences, Genève — 01.02.12 – 07.04.13
Espace des inventions, Lausanne — 17.01.14 – 27.04.14
partially taken up at Palais de la découverte, Paris — 06.12.16 – 27.08.17
- 2008 Contribution to the exhibition *Jardin de maths*
Conservatoire et Jardin botaniques, Genève — 27.05.08 – 12.10.08
- 2007 Contribution to the exhibition *Euler, l'imagination souveraine*
Musée d'histoire des sciences, Genève — 02.05.07 – 28.10.07

Regular contributions

- 2010 – 2020 Monthly contribution to the rubric *Problème du mois* on RTSdécouverte.ch
- 2017 – 2019 Trimestrial contribution to the rubric *La science en s'amusant* in MigrosMagazine
- 2014 – 2015 Contribution to the TV show *L'Oreille des kids* on Radio Télévision Suisse (RTS)

Expertise in outreach

- 2021 Participation to **AgoraForum'21**,
Science Communication Expert
- 2016 – 2018 Participation to the creation of **La Moulinette**
on mandate from Réseau Romand Science et Cité, creation of a reflexive tool to assist in
the design and monitoring of scientific mediation projects
- 2010, 2014 Writing activities for **Semaine des Mathématiques 2017, 2014** and **2010**
and 2017 on mandate from Commission de l'Enseignement Mathématique et des Sciences Naturelles
(CEMSN), creating and writing activities for teachers of all levels

PRIZE

- 2012 **Prix d'Alembert** from the Société mathématique de France (SMF)
(co-recipient Dr. Pierre-Alain Cherix)

NARRATIVE

Since 2012, I study how to present science, and mathematics in particular, to the general public in an attractive way. What messages should be conveyed? What is the right mix between presentation and hands-on activities? (see Fiorelli et al. *Evaluer une action de vulgarisation des mathématiques* and Fiorelli et al. *Regard sur les ateliers récréatifs*).

The **Mathscope** is the main outcome of these reflections. Launched in 2015, it was the first such structure about math popularization in a Swiss University. Since then, it becomes a reference for likewise structure in Switzerland. I have established collaborations with ETH Zürich, EPF Lausanne and University of Neuchâtel who want to create similar activities.

In addition, I am in contact with institutions like the Palais de la Découverte (Paris) or the Maison des mathématiques et de l'informatique (Lyon) and other outreach actors. These exchanges allow a renewal of activities and a broadening of the scope of my projects.

Moreover, I am often solicited for developing activities in different contexts: workshop for schools or after-school, exhibitions, fairs, outreach presentations in international colloquia.

Being part of the Sciencopie allows to experiment interdisciplinarity and I have ongoing collaborations with other outreach labs to develop new activities with the view of two or more sciences.