

# Giacomo Elefante

## Contact

### Current Address:

Chemin du Musée, 23  
Fribourg CH-1700  
Switzerland

giacomo.elefante@unifr.ch

## Languages

italian native speaking  
english fluent  
french intermediate

## Programming Languages

Matlab  
C, C++  
Wolfram Mathematica  
R  
Python  
LaTeX  
HTML

## Personal Data

Born in Adria (RO) - Italy on January 7<sup>th</sup>, 1991

**Nationality:** Italian

**Gender:** Male

## Current Position

03.2015-Present **Université de Fribourg/ Universität Freiburg**

*Ph.D. in Mathematics*

**Supervisor:** Professor Jean-Paul Berrut

Fribourg/Freiburg, Switzerland

## Experience

09.2016-Present **Université de Fribourg/ Universität Freiburg**

*Teaching assistant 100%*

Fribourg/Freiburg, Switzerland

04.2016-08.2016 **Université de Fribourg/ Universität Freiburg**

*Teaching assistant 50%*

Fribourg/Freiburg, Switzerland

06.2014-01.2015 **Università degli Studi di Padova**

*Part-time collaboration*

Padova, Italy

200 hours of part-time collaboration in the Library of the Math Department of University of Padova

## Teaching assistant experience

Spring 2018 **Université de Fribourg/ Universität Freiburg**

*Introduction of Numerical Analysis II  
Analysis II*

Fribourg/Freiburg, Switzerland

Fall 2017 **Université de Fribourg/ Universität Freiburg**

*Introduction of Numerical Analysis I  
Analysis I*

Fribourg/Freiburg, Switzerland

Spring 2017 **Université de Fribourg/ Universität Freiburg**

*Introduction of Numerical Analysis II  
Mathematical Methods for Computer Science II*

Fribourg/Freiburg, Switzerland

Fall 2016 **Université de Fribourg/ Universität Freiburg**

*Introduction of Numerical Analysis I  
Mathematical Methods for Computer Science I*

Fribourg/Freiburg, Switzerland

## Education

12.2013–12.2015 **Master degree** in Mathematics

Cubature on manifolds with low-discrepancy and minimal energy points

**Supervisor:** Prof. Stefano De Marchi

**Co-Supervisor:** Prof. Leszek Plaskota

Università degli studi di Padova

02.2015–07.2015 **Exchange period** at Uniwersytet Warszawski

Exchange abroad in Warsaw (Poland) through Erasmus+ Studio programme

Erasmus+

10.2010–12.2013 **Bachelor degree** in Mathematics

Simulazione perfetta con automi cellulari probabilistici (Perfect simulation with probabilistic cellular automata)

**Supervisor:** Prof. Paolo Dai Pra

Università degli Studi di Padova

09.2005–07.2010 **Diploma** di Maturità

Liceo Scientifico P. Paleocapa

## Papers

- 2018 **Quasi-Monte Carlo integration on manifolds with mapped low-discrepancy points and greedy minimal Riesz  $s$ -energy points** (draft)  
Stefano De Marchi and Giacomo Elefante, Appl. Num. Math. 127(5), pp. 110-124 (2018)
- 2016 **A new quasi-Monte Carlo technique based on nonnegative least-squares and approximate Fekete points** (draft)  
Claudia Bittante, Stefano De Marchi and Giacomo Elefante - Numer. Math. TMA. 9(4), pp. 640–663

## Attended Conferences

### **Seminari Padovani di Analisi Numerica 2018**

at Padova, Italy - Organized by Departments of Mathematics of "Tullio Levi-Civita", CAA Research Group and RITA  
May 03 - May 04, 2018

### **Swiss Numerics Day 2018**

at Zürich, Switzerland - Organized by ETH  
April 20, 2018

### **Dolomites Research Week on Approximation 2017**

at Alba di Canazei (TN), Italy - Organized by CAA-Research Group  
September 04 - September 08, 2017

### **Sampling Theory and Applications, 12th International Conference**

at Tallinn, Estonia - Organized by University of Tallinn et al.  
July 03 - July 07, 2017

### **Colloque Numérique Suisse / Schweizer Numerik Kolloquium 2017**

at Basel, Switzerland - Organized by Universität Basel, CUSO  
April 28, 2017

### **WesNUM 2017**

at Engelberg, Switzerland - Organized by Universität Basel, CUSO  
February 07 - February 09, 2017

### **4<sup>th</sup> Dolomites Workshop on Constructive Approximation and Applications**

at Alba di Canazei (TN), Italy - Organized by CAA-Research Group  
September 08 - September 13, 2016

### **Colloque Numérique Suisse / Schweizer Numerik Kolloquium 2016**

at Fribourg, Switzerland - Organized by Université de Fribourg, Haute école d'ingénierie et d'architecture Fribourg  
April 22, 2016

### **Dolomites Research Week on Approximation 2015**

at Alba di Canazei (TN), Italy - Organized by CAA-Research Group  
September 05 - September 08, 2015

## Posters

### **Integration on manifolds by mapped low-discrepancy points and greedy minimal $k_s$ -energy points**

at DWCAA16, Alba di Canazei (TN), Italy  
September 08 - September 13, 2016

## Talks

**Integration on manifolds by mapped low-discrepancy points and greedy minimal  $k_s$ -energy points**

Seminari Padovani di Analisi Numerica 2018

at SPAN18 - Organized by Departments of Mathematics of "Tullio Levi-Civita", CAA Research Group and RITA  
Padova , Italy - May 03 - 04, 2018

## Divulgative Talks

**Crittografia e codici: Protezione delle informazioni**

TecDay 2017

with Edoardo Dotti at TecDay 2017 - Organized by satw and Liceo Lugano 1  
at Lugano, Switzerland - November 29, 2017

## Certifications

**ECDL**

Licence IT 1163983