



## IMPA – Institute of Pure and Applied

<b>Name of the organisation:</b>	IMPA– Institute of Pure and Applied Mathematics	
<b>Address:</b>	Estrada Dona Castorina 110 22460-320 Rio de Janeiro Brazil	
<b>Tel:</b>	+55 2125295270	
<b>Web site:</b>	<a href="http://www.impa.br">www.impa.br</a>	

<b>Contact person:</b>	Marcelo Viana
<b>Function:</b>	<b>Professor and Director</b>
<b>Tel:</b>	<b>+552125295270</b>
<b>E-mail:</b>	<a href="mailto:viana@impa.br">viana@impa.br</a>

### Description of the Organisation

The Instituto Nacional de Matemática Pura e Aplicada (IMPA) is reputed as one of the most well-established research institutes in the world. It played a leading role in the developments of dynamical systems through the works of Mane, Palis and Peixoto. It has well developed collaborations with leading mathematicians from abroad such as S. Smale and J-C Yoccoz. Such leading position was confirmed with the award of one the Fields Medal to IMPA's extraordinary researcher Artur Avila.

In 2018, it will be the key organizing institution of the International Congress of Mathematicians (ICM) which will take place in Rio de Janeiro, Brazil.

Furthermore, the Unité Mixte Internationale CNRS - IMPA (IMPA 2294) is located at IMPA and was created through an agreement signed in 2006 with the Centre National de la Recherche Scientifique (CNRS). In the subject of mathematical modelling, IMPA has three active labs, namely Fluids, Visgraf, and the Laboratory for Analysis and Mathematical Modelling in the Applied Sciences (LAMCA).

In the field of Mathematical Modelling in Finance and Energy, IMPA has ongoing collaboration agreements with Petrobras and with the Brazilian Stock Exchange (BMF Bovespa) in the area of Portfolio Management and Counterpart Risk. It also has a Professional Master Program in the Mathematical Modelling in Finance.

IMPA has hosted throughout the last 10 years over 10 international workshops in the subject of mathematical modelling in Finance and in the subject of mathematical modelling of biophysical phenomena.



## Role of the Organisation in the project

Following the approval of the Amendment n. 1, WP2 Leaderships will be changed: the leadership is transferred from IMPA to UNIBO.

Tasks and responsibilities of IMPA are therefore adjusted in line to its new support in the GrEnFIn project. IMPA will support the WP2 leader concerning the stakeholder's consultation and surveys (WP2) and strongly supports the dissemination and exploitation of results (WP11) whose role of extra EU partner country. For that concerns WP2 IMPA will contribute in particular to the evaluation of the survey and discussion of learning outcomes and methodologies which should be implemented.

On the other hand, given his important role in the energy market both in EU and in extra-EU countries, IMPA will be pivotal in the dissemination phase concerning WP11. IMPA will disseminate the project during the three years in important academic/business forum that will take place both in EU and in extra-EU countries.

Moreover, we recall that an important feature of IMPA comes from his activities with students. In fact, IMPA receives a large number of students and researchers from all over the world in the various fields of Mathematics, ranging from Applied Mathematics to Mathematical Education and knowledge diffusion. It also hosts a number of conferences throughout the year and has an active fully accredited post-graduate program. It will participate both by hosting students and researchers as well providing technical training, and sending interested students to the program.

## Contact Person's Experience and Expertise

Marcelo Viana is a professor of mathematics and the current director of the Instituto de Matemática Pura e Aplicada (IMPA) in Rio de Janeiro. A specialist in dynamical systems and ergodic theory, he published about sixty research papers and supervised over forty Ph.D. students. He was the president of the Brazilian Mathematical Society and a vice-president of the International Mathematical Union. He was twice invited to address the International Congress of Mathematicians, in Zurich 1994 and Berlin 1998, the second time as a plenary speaker. He was also a plenary speaker at the International Congress of Mathematical Physics in Paris 1994, and at the International Congress on Industrial and Applied Mathematics in Valencia 2019. He is a member of four academies of sciences and received several academic distinctions, such as the inaugural Ramanujan prize of the International Centre for Theoretical Physics, and the Grand Prix Scientifique Louis D. of the Institut de France. He organized the 2018 International Congress of Mathematicians, in Rio de Janeiro, and he is a driving force in the Mathematical Council of the Americas, the continental network he helped to create in 2012. He actively promotes the popularization of mathematics through a wide range of initiatives, such as the Brazilian National Math Festival. As the director of IMPA, he oversees the realization of the Brazilian Math Olympiad, with the participation of about 20 million students every year. He writes a weekly column about science in Folha de São Paulo, Brazil's prominent newspaper.