



Annex 1

Position 1

Scientific Area of SISSA: Mathematics

Smart specialisation strategy areas (S3) of Friuli Venezia Giulia and their development trajectories:
Strategic production chains, industry engineering: technologies for the numerical modelling of processes and products and/or methods and technologies for integrated design and/or intelligent machines

Area: 01 – Mathematics and information technology sciences

Competition sector: 01/A5 Numerical analysis and 08/B2 Construction sciences

Relevant academic scientific sector: MAT/08 Numerical analysis and ICAR/08 Construction sciences

Scientific responsible: Prof. Gianluigi Rozza

Duration of the fellowship: 24 months

Foreseen starting date of the activity: 01/04/2017

Gross annual fellowship: € 24.336

Requisites: Degree in Mechanical, Aerospace, Aeronautical, Mathematical, Civil, Nuclear Engineering, Mathematics, Physics.

Experience in numerical and mathematical modelling for fluid dynamics, simulation of complex systems and scientific calculus in Multiphysics, fluid-structure interaction, numerical fluid dynamics, controlling, parametrization and optimization, computational complexity reduction methods. Advanced programming. Usage of open-source libraries for finite volumes.

A PhD in Applied Mathematics or Engineering will be considered as an asset.

Gross total cost of the research fellowship € 59.500: shall be funded by project HEaD – HIGHER EDUCATION AND DEVELOPMENT SISSA OPERATION 1 (FP1619889002), approved with decree of the autonomous region Friuli Venezia Giulia n. 2242 dated 11.04.2016 for the exclusive scope of the project funding the research fellowship.



Evaluation criteria:

PhD (evaluated as an asset): max 10 points

University degree: max 5 points

Published works and other research products: max 25 points

Other postgraduate degrees: max 5 points

Other titles: max 15 points

Research project: max 40 points