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 Mechanics of Solids and Structures (Scienza delle Costruzioni)
Relevant academic scientific sector: MAT/08 Numerical analysis and ICAR/08 Mechanics of Solids and Structures (Scienza delle Costruzioni)

Scientific responsible: Prof. Antonio De Simone

Duration of the fellowship: 24 months

Foreseen starting date of the activity: 01.12.2017

Gross annual fellowship: € 24.336

Requisites: Degree in Mathematics, Physics, Mechanical, Aerospace, Aeronautical, Mathematical, Civil, Materials, Industrial Engineering or similar subjects.
Experience in research activities relevant to numerical and mathematical modelling for the mechanics of solids and materials (in particular: computational mechanics of solids, plasticity, fracture) simulation of complex systems and scientific computing in Multiphysics, e.g. fluid-structure interaction.
Computer programming. Usage of advanced libraries for calculus and simulation (in particular: computational mechanics).
A PhD in Applied Mathematics, Engineering or related areas will be considered as an asset.

Gross total cost of the research fellowship € 59.770: 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: 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