

<b>Call number</b>	MPHS_07
<b>Research project's title</b>	Mathematical and physical methods for advanced materials and technologies.
<b>Abstract of the research project</b>	<p>The scientific activity of the candidate should fit in at least one of the following research areas:</p> <p>(i) linear and nonlinear differential equations, calculus of variations, dynamical systems, geometric and functional analysis, and all areas of mathematical analysis with potential applications to materials science;</p> <p>(ii) new methods and techniques in theoretical and experimental physics of matter or in experimental physics of fundamental interactions, with potential new technological applications and fallout</p> <p>(iii) chemical/physical modeling of either phenomena/processes using thermodynamic tools or transport theory; design of transformation processes of soft matter; modeling of the interaction between electromagnetic fields and matter.</p> <p>The successful candidates will carry out their research program in tight coordination with the research staff already involved with the School activities. They will also be involved in the teaching and tutorial activity of the School by given either course at PhD level at undergraduate level for the students of the School.</p>
<b>S.S.D.</b>	MAT/05; FIS/01, FIS/03; ING-IND/22, ING-IND/26, ING-IND/31
<b>Research areas</b>	Partial differential equations, Calculus of variations; Experimental physics, Physics of matter; Materials science and technology of materials; Theory of chemical processes; Electrotechnics
<b>Scientific coordinator</b>	Prof. Nicola Fusco
<b>Program duration</b>	1 year, renewable up to 3
<b>Salary</b>	€ 35.000
<b>Date of publication on the SSM website of the shortlist and dates of the interviews</b>	28/03/2023

<b>Website for information and notifications to the candidates</b>	<a href="https://www.unissme.it/en-us/la-scuola#bandi-e-avvisi">https://www.unissme.it/en-us/la-scuola#bandi-e-avvisi</a> <a href="http://www.ssm.unina.it/en/postdoctoral-fellowships-calls-and-procedures/">http://www.ssm.unina.it/en/postdoctoral-fellowships-calls-and-procedures/</a>
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