



PhD in INGEGNERIA AEROSPAZIALE / AEROSPACE ENGINEERING - 39th cycle

THEMATIC Research Field: MULTI-STABLE AEROSPACE COMPOSITE STRUCTURES

Monthly net income of PhDscholarship (max 36 months)

€ 1400.0

In case of a change of the welfare rates during the three-year period, the amount could be modified.

Context of the research activity

Motivation and objectives of the research in this field	<p>To develop a methodology for the design of multi-stable aerospace composite structures.</p> <p>The pressing need to reduce the environmental impact of air transport and the aerospace sector, in general, drives the search for innovative solutions that involve all disciplines. In particular, in the field of aerospace structures in composite material, there is an evident need to design and build ever more efficient structures that contribute significantly to the overall efficiency of the aircraft.</p> <p>These new, lighter, flexible multi-stable structures will be able to adapt their shape during different flight conditions to increase efficiency and at the same time reduce emissions.</p>
Methods and techniques that will be developed and used to carry out the research	<p>The methodology to be developed for the design of multi-stable aerospace composite structures requires an integrated approach including analysis, optimization and testing.</p>
Educational objectives	<p>To optimize aerospace multi-stable composite structures using a multi-disciplinary approach.</p>
Job opportunities	<p>The acquired knowledge can be applied in different sectors where lightweight structures play a significant role.</p>
Composition of the research group	<p>1 Full Professors 0 Associated Professors 1 Assistant Professors</p>



	5 PhD Students
Name of the research directors	Prof. Chiara Bisagni

Contacts
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Additional support - Financial aid per PhD student per year (gross amount)	
Housing - Foreign Students	--
Housing - Out-of-town residents (more than 80Km out of Milano)	--

Scholarship Increase for a period abroad	
Amount monthly	700.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
The PhD candidate will receive a desk, possibly through a hot-desking procedure, and a personal computer, if needed. Apart from the compulsory ones, the PhD candidate will have the opportunity to follow additional courses and receive economic support to attend summer schools and participate in conferences. There will be the possibility of paid teaching assistantship.