



PhD in FISICA / PHYSICS - 39th cycle

THEMATIC Research Field: OPTICAL METASURFACES FOR LIGHT STRUCTURING.

Monthly net income of PhDscholarship (max 36 months)
€ 1300.0
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	The thesis aims at investigating light-matter interaction at the nanoscale by realizing new nanostructured surfaces, optical metasurfaces. Advanced nano-fabrication techniques will be used, supported by numerical simulations of the designed devices.
Methods and techniques that will be developed and used to carry out the research	Cleanroom nano-fabrication techniques will be used for the device production. Complex laser and microscopy setups will be used for the characterization of the devices.
Educational objectives	Investigation of light-matter interaction at the nanoscale.
Job opportunities	Lightweight and wearable optoelectronics is now experiencing large interest from big industrial players, for devices ranging from cell phone cameras to augmented and virtual reality.
Composition of the research group	1 Full Professors 1 Associated Professors 6 Assistant Professors 8 PhD Students
Name of the research directors	Ambrosio Antonio

Contacts
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http://cnst.iit.it/
https://www.iit.it/it/web/vectorial-nano-imaging



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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	650.0 €
By number of months	6

Additional information: educational activity, teaching assistantship, computer availability, desk availability, any other information
<p>Educational activities (purchase of study books and material, funding for participation to courses, summer schools, workshops and conferences): financial aid per PhD student per 3 years: max 5.300,25 euros per student.</p> <p>Teaching assistantship: There are various forms of financial aid for activities of support to the teaching practice. The PhD student is encouraged to take part in these activities, within the limits allowed by the regulations.</p> <p>Computer and desk availability: individual use computer and desk .</p>