

<b>TRAINEESHIP INFORMATION</b>	
<b>Department/Office</b>	Department of Physics and Earth Sciences “Macedonio Melloni”
<b>Contact person</b>	Prof. Luigi Cristofolini
<b>Contact e-mail</b>	<a href="mailto:internship@unipr.it">internship@unipr.it</a>
<b>Description of activities</b>	<p>Characterization of structure, mechanical properties and internal dynamics of interfacial layers, using the whole suite of techniques available in our laboratories (<a href="http://www.fis.unipr.it/lmn">www.fis.unipr.it/lmn</a> ).</p> <p>As an example, we investigate the nanostructures realized at the water surfaces by nanoparticles, alone or in conjunction with others molecules (polymers, proteins, phospholipids). Depending on interactions between nanoparticles and molecules, these nanostructures can show different structures, with fractal-like features, and/or with unusual mechanical properties and strongly non-diffusive dynamical features.</p> <p>Aside from the fundamental theoretical interest, these nanostructures have relevant applicative impact in the fields of material science (nanosensors and devices) and nanomedicine.</p>
<b>Working language</b>	English or Italian (C1 CEFR)
<b>Location</b>	Viale G.P. Usberti n. 7/A 43124 – Parma - Italy
<b>Duration (2 months minimum-12 months maximum)</b>	6
<b>Working hours / week</b>	Timetable to be agreed accordingly
<b>Accommodation</b>	<p>The Welcome Office supports students in finding accommodation in Parma</p> <p>Servizio Accoglienza/Welcome Office Università di Parma Vicolo Grossardi 4 43125 Parma – Italy</p> <p>e-mail <a href="mailto:welcome@unipr.it">welcome@unipr.it</a></p>



**T14023 -TRAINEESHIP AT DEPARTMENT OF PHYSICS AND EARTH SCIENCES**

	phone: 0039 0521 904150 / 904632	
<b>Internship grant</b>	No financial contribution. Students must apply for a Grant at their home institution/country.	
<b>COMPETENCES, SKILLS AND EXPERIENCE REQUIREMENTS</b>		
<b>Competences required</b>	Basic laboratory skills. Basic chemistry laboratory experience is a useful (but not required) asset.	
<b>Degree (Master, PhD, Post Doc)</b>	Master degree in Physics, or in Chemistry, or in Material Science	
<b>DOCUMENTS REQUIRED</b>		
<b>Interested students must send by email asap, the following documentation:</b>		
<b>Presentation letter X</b>	<b>Curriculum Vitae X</b>	<b>Academic certificates X</b>
<b>Additional notes</b>	If the Sending Institution does not provide a fully comprehensive insurance (experimental work included), the student himself/herself must take out a personal one that covers also laboratory activities.	