

<b>PI name &amp; contact details:</b>	Prof. Stefan Hutzler, School of Physics, Trinity College Dublin, Ireland. Email: stefan.hutzler@tcd.ie	
<b>School:</b>	School of Physics, Trinity College Dublin	
<i>Has project been agreed with head (or nominee) of proposed registration school?</i>	YES	
<b>Research Centre / group affiliation:</b>	Foams and Complex Systems	
<b>Research group / centre website:</b>	<a href="http://www.tcd.ie/physics/foams">www.tcd.ie/physics/foams</a>	
<b>PI website / link to CV:</b>	<a href="http://www.tcd.ie/Physics/Foams/docs_public/CV_Hutzler_2012.pdf">http://www.tcd.ie/Physics/Foams/docs_public/CV_Hutzler_2012.pdf</a>	
<b>Brief summary of PI research / research group / centre activity (2 or 3 lines max):</b>		
Focus of the research group is the physics of foam, including structure, drainage and rheology. The approach taken combines experiments with computer simulations and theory.		
<b>Title &amp; brief description of PhD project (suitable for publication on web):</b>		
<u>The arrangement of soap bubbles in confinement</u>		
This project will examine how ordered foams can be produced by using appropriate templating techniques, together with state-of-the-art tomography. This is relevant also to the general understanding of crystal structure and defects, with bubbles taking the role of atoms. The project will be carried out in collaboration with the Helmholtz Institute Berlin, Germany.		
<b>Unique selling points of PhD project in TCD:</b>		
<i>projects should offer something that's not available in Brazil – specific equipment, multi-disciplinarity, aspects of structured programme, links with industry, placements, links with other research groups etc.</i>		
The Trinity PhD is a structured PhD and students can access discipline-specific training, as well as generic and transferable skills. All PhD students are eligible to participate in the Innovation Academy which offers a Postgraduate Certificate in Innovation and Entrepreneurship to assist PhD students identify and exploit the value within their research.		
<b>Name &amp; contact details for project queries, if different from PI named above: see details above</b>		
<b>Please indicate the graduates of which disciplines that should apply:</b>		
Physics		
<b>Ciência sem Fronteiras / Science Without Borders Priority Area:</b>		
<i>Please indicate the specific programme priority area under which the proposed PhD project fits- choose only one (tick box):</i>		
Engineering and other technological areas		
Pure and Natural Sciences (e.g. mathematics, physics, chemistry)		x
Health and Biomedical Sciences		
Information and Communication Technologies (ICTs)		
Aerospace		
Pharmaceuticals		
Oil, Gas and Coal		
Renewable Energy		
Minerals		

Biotechnology	
Nanotechnology and New Materials	
Technology of prevention and remediation of natural disasters	
Biodiversity and Bioprospection	
Marine Sciences	
Creative Industry	
New technologies in constructive engineering	