

PI name & contact details:	Prof. Stefan Hutzler, School of Physics, Trinity College Dublin, Ireland. Email: stefan.hutzler@tcd.ie	
School:	School of Physics, Trinity College Dublin	
<i>Has project been agreed with head (or nominee) of proposed registration school?</i>	YES	
Research Centre / group affiliation:	Foams and Complex Systems	
Research group / centre website:	http://www.tcd.ie/physics/foams	
PI website / link to CV:	http://www.tcd.ie/physics/foams/docs_public/CV_Hutzler_2012.pdf	
Brief summary of PI research / research group / centre activity (2 or 3 lines max):		
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.		
Title & brief description of PhD project (suitable for publication on web):		
Surface Evolver simulations of soap film configurations		
The Surface Evolver is an advanced software tool for the computation of liquid surfaces (www.susqu.edu/brakke/evolver). This project will apply the Surface Evolver to dynamic problems associated with rearrangements of configurations of soap films, which are of both physical and mathematical interest. Simulations will be accompanied with experiments.		
Unique selling points of PhD project in TCD:		
<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.		
Name & contact details for project queries, if different from PI named above: see details above		
Please indicate the graduates of which disciplines that should apply:		
Physics		
Ciência sem Fronteiras / Science Without Borders Priority Area:		
<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	