# thebigbangfair.co.uk

Big Bang Education 246 High Holborn London, WC1V 7EX Reg no: 7264555



## THE BIG BANG 2011

### PARTICIPATION AGREEMENT

	London South Bank University, Centre for Automated and Robotic
Parties	NDT, Faculty of Engineering, Science & the Built Environment, 103 Borough Road, London, SE1 0AA
Parties	, ,
	<b>'ADP' BIG BANG EDUCATION CIC</b> (registered number 7264555) whose registered office is at 2 <sup>nd</sup> floor, 246 High Holborn, London, WC1V 7EX
	("The Big Bang")
	From date of signature to 12 <sup>th</sup> March 2011
	Trom date of signature to 12 Waren 2011
Term	
	The Big Bang: UK Young Scientists and Engineers Fair 2011
Event	
	Interactive Stand: Robot Detectives
Activity	
	10 <sup>th</sup> – 12 <sup>th</sup> March 2011
	Opening hours as per Appendix 3.
Date and time	
of Activity	
	International Convention Centre London ExCeL. ("ICC London
	ExCeL'')
Venue and	North Hall – Stand TA1 (3m x 3m)
location	
	None payable
Fee	

#### The Royal Academy of Engineering Exhibition Zone

Be amazed at some of the exciting science and engineering research projects taking place in the UK right now. You will be able to interact with the exhibits, take part in the activities and experiments and talk to the local researchers involved from London South Bank University and Queen Mary, University of London. Find out about the intelligent computing systems that are being developed so that live rock bands can keep the beat and try your rhythm skills on the drum kit. Observe state of the art technology that allows robots to stick to and climb walls like Spiderman, shimmy up and down vertical pipes and even swim through water and oil. Have a go at operating one of these marvellous machines and see if you can find the defect in the steel wall using the robot's powers of 'seeing' through metal.

Dr Lesley Paterson Head of Communications and Engagement The Royal Academy of Engineering 020 7766 0684

#### Ingenious

A grant scheme for creative public engagement with engineering projects.

# Wall climbing robots inspire young scientists at Big Bang Fair

Wall climbing, pipe crawling and swimming robots developed at London South Bank University (LSBU) in ESBE are at the centre of the Royal Academy of Engineering's stand at the Big Bang Fair.



LSBU is showcasing its wall climbing robots at the Big Bang Fair.

The <u>Big Bang Fair</u>, which runs 10-12 March at London's ExCel, is the UK's biggest single celebration of science and engineering for young people, aiming to inspire 25,000 schoolchildren and students from across the UK.

In the Royal Academy of Engineering's Exhibition Zone, the ESBE team, led by Dr Tariq Sattar of the <u>Department of Engineering and Design</u>, is showcasing the robots, which were developed by ESBE's Centre for Automated and Robotic Non-Destructive Testing.

At the stand young visitors will be able to teleoperate a climbing robot to find hidden defects in a steel plate using ultrasound. There will also be an interactive display that uses permanent magnets to explore vertical and horizontal levitation and to generate eddy currents to detect hidden materials.

Posted: 11 March 2011