

# The Robotic Liverpool Telescope





#### Discover the Cosmos

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myHDWallpaper.com

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## The Liverpool Telescope



The Liverpool Telescope is sited on the Spanish island of La Palma.

With the benefit of good weather, dark nights and a 2400m extinct volcano, the Roque de los Muchachos observatory hosts 14 telescopes from a number of EU nations, and is widely considered to be one of the top two observing sites in the northern hemisphere.

#### The Liverpool Telescope



Fully robotic 2 metre mirror telescope – Clamshell Enclosure
8.5 m high, 6.5 m wide and weighs 24 tonnes
Designed for rapid response – Supernovae, GRBs, NEOs
Six instruments – RATCam, RISE, RINGO2, FRODOspec, IO, SkyCam
Sophisticated scheduling system – no human intervention
90% used by professional astronomers, 10% UK & Spanish schools

## National Schools Observatory



Established (2004) to provide schools in the UK and Ireland with access to the Liverpool Telescope through a guided observing system, together with astronomy related content, news and learning activities.

### National Schools Observatory (LJMU)



Active Accounts 2432 Teacher ; 4908 Student

#### Observing Requests Total : 29143 ; average 1000+ per month in term time.

Website Visits 1.2 million pages served per year ; average 4300 unique visitors per week

## Go Observing

#### **Guided Observing System**

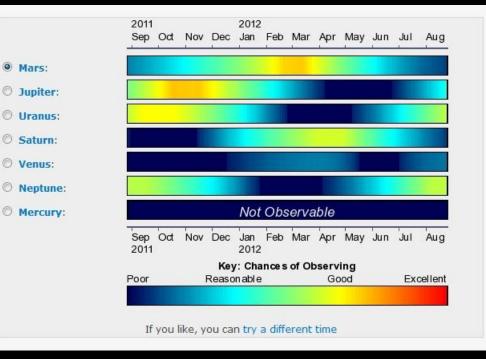
Designed for ages: 7+

Moon, Planets, Galaxies, Nebulae

Single Filter or Three Filter (Colour)

Projects:

Exoplanet Transits NEO, Asteroids Supernovae





## **NSO** Projects and Activities

#### Activities View Edit Grant

Here we have a selection of astronomy-related activities that combine elements of science, maths and ICT. The **projects** are collaborative ventures, with students from different schools working together to achieve the same goal, such as determining the path of an asteroid. **Workshops**, on the other hand, are self-contained lessons that can be downloaded and presented to individuals or groups.

For more detailed information, please select the appropriate link:

NSO Projects		edexcel	<	A
	NSO Workshops	GCSE Astronomy	Maths and ICT	
Name	Description		Age	Time
Moonsaic : 1 - 5	Assemble some mosaics of the Moon at different phases		7-14	1 hou
lunting for Asteroids	Detect and calculate the velocity of nearby asteroids		7-10	
unar Craters	Investigate cratering on the surface of the Moon		7-10	
Quiz Corner	A few quizzes to test your knowledge of astronomy		11-: 🕅	
3-Colour Imaging	Learn about creating 3-colour images using LTImage		11-: W.SC	
Gravity Workshop	See how the effect of gravity changes on different planets		11-: 11-: 11-: 14-: 14-:	
Galaxy Classification	Identify the different types of galaxy in the Universe			
Sunspots Workshop	Look for patterns in surface activity on the Sun		14-: V	
Seeing Workshop	Investigate why stars twinkle and why it's a problem		14-: 14-:	
ides Workshop	Discover what causes the tides in Earth's oceans		14-: OF	

#### Investigations | Calculation

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# **Any Questions ?**



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