



ROBERT GORDON'S COLLEGE

Celebrating the 2015 Solar Eclipse

On the morning of Friday 20th March 2015 there will be a total solar eclipse. From the UK it will actually appear as a partial solar eclipse and the nearest land to the UK where it will be visible as a truly total eclipse will be the Faroe Islands. Northerly latitudes will see larger amount of the Sun's disk being covered as the Moon passes in front, with Aberdeen having 93% coverage at maximum eclipse. As with all Earth based observations this is weather dependant; but this is expected to be the best eclipse visible from the UK until 2026.

To celebrate this event Robert Gordon's College is hosting a series of pupil and public talks to occur during the eclipse. Local schools and the general public are invited to the talks which will be mixing live commentary and observation of the eclipse with a physics lecture.

Given the difficulty in viewing a partial eclipse safely there will be a live feed from a dedicated solar telescope mounted on the tallest of our buildings. This robotically controlled telescope will produce, weather permitting, a more detailed view of the Sun by limiting the view to a particular red wavelength of light known as Hydrogen-alpha.

In 2015 Einstein's theory of General Relativity will be celebrating its centenary of being published. The link to the eclipse is that in 1919 Sir Arthur Eddington used an eclipse to provide the first experimental evidence for the theory. This will be the topic of the talk in the new Craig Centre for Performing Arts for the public and all RGC pupils studying Astronomy and/or Higher or Advanced Higher Physics. The talk will be given by Sophie Allan a highly experienced Physics Teacher for the National Space Academy who delivers talks and workshops to pupils and teachers across the UK and Europe.

At the same time Neville Browne, a long-time member of Aberdeen Astronomical Society, will give a talk on the Earth-Moon-Sun system and how eclipses occur. As with many of the society, his enthusiasm and experience go beyond what many would expect of "amateur" astronomy. This talk will be attended by all S2 pupils of RGC and is also open to the public without the assumption of any prior knowledge of the topic.

First contact, the very beginning of the eclipse, will be at 8:33 am in Aberdeen and the talks will run from 8:50 to 10:00, including a visit outside to observe totality if the weather is suitable. Following this tea and coffee will be served in the foyer of the Craig Centre for Performing Arts, followed by an open question and answers session for senior pupils and the public. During this the eclipse will end with last contact happening at 10:46.

Robert Gordon's College wishes to thank the Royal Society of Edinburgh's Cormack Grant, the Institute of Physics and the British Science Association for providing funds towards this event, as well as the assistance of the National Space Academy and Aberdeen Astronomical Society – in particular Neville Browne.

This event as just one part of RGC's celebration of British Science Week Grant and the International Year Of Light.

For any enquiries please contact Mr Browett of the Physics department on t.browett@rgc.aberdeen.sch.uk.

