BISHOP HEBER HIGH SCHOOL

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6 November 2013

Dear Parent / Carer,

GRAVITY FILM, THURSDAY 14 NOVEMBER

'Life in space is impossible' appears on screen at the beginning of Gravity, the new film by Alfonso Cuarón, starring Sandra Bullock and George Clooney as two American astronauts on a mission to repair the Hubble Telescope. The film has received considerable acclaim from both critics and audiences, not least for the effort which has been put into getting the physics of orbital dynamics correct. The astronaut Buzz Aldrin has praised 'the portrayal of the reality of zero gravity'.

I am delighted that we are going to be able to go and see this film after School on 14 November as a physics trip. This film is relevant to several topics in 'A'-level physics, including gravitational fields and orbits, kinematics and dynamics (expecially force, momentum and energy). It would also extend students' physical intuition into areas such as rotational dynamics of rigid bodies, which are understandable from their present knowledge, but lie outside the current 'A'-level specification.

We shall travel to the Vue cinema at Cheshire Oaks in the School minibus, departing from Bishop Heber at 3.30 p.m. The cost of this trip will be £13.75, which will cover the price of entry to the cinema, transport, and other costs associated with the trip such as insurance. Students should bring with them a small amount of money if they wish to avail themselves of the opportunity to purchase some snacks and refreshments at the cinema. We are planning to attend the 4.30 p.m. RealD 3D showing of Gravity (which of course uses circularly polarized light to produce stereoscopic image projection). We therefore expect to return to Bishop Heber at 7.15 p.m., and the students should arrange to be picked up promptly at that time.

Please do not hesitate to contact me if you have any further questions.

Yours sincerely,

Andrew Norman

Teacher of Science

enc. Form 'C'



