

REBEL STAR: THE SUN'S GREATEST MYSTERIES

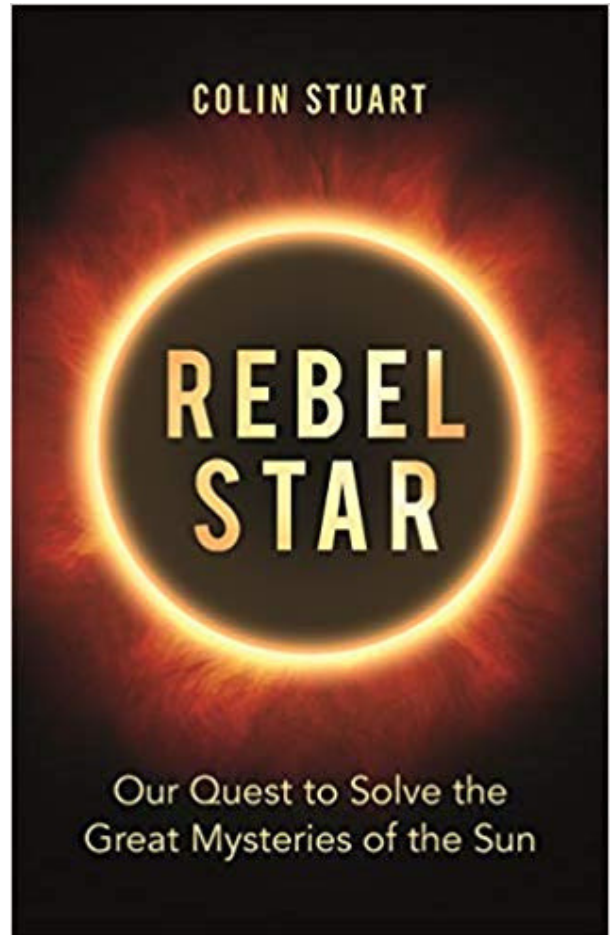
GET TO KNOW OUR NEAREST STAR LIKE NEVER BEFORE

The Sun is many things: beauty, beacon, battery, belligerent. It's the biggest thing for light-years around and yet we actually know relatively little about it.

That's changing thanks to an armada of new spacecraft recently lofted into the solar system to scrutinise the Sun in unprecedented detail.

In a talk packed full of jaw-dropping images and videos, astronomy author Colin Stuart is your guide on a journey deep into the heart of our nearest star. It's the perfect way to reinforce many aspects of the physics curriculum (see next page).

You'll never look at the Sun in quite the same way again.



Signed copies will be available to buy as part of my visit

CLICK OR PRESS HERE TO SEE THE FIRST 2 MINUTES



COLIN STUART

Colin Stuart is an astronomy author and speaker who has talked to over half a million people about the universe. His books have sold more than 300,000 copies worldwide and been translated into 19 languages. He's also written for The Guardian, New Scientist, Wall Street Journal and the European Space Agency. In recognition of his efforts to popularise astronomy the asteroid (15347) Colinstuart is named after him. Also a Fellow of the Royal Astronomical Society, Colin has appeared on Sky News, BBC News and Radio 5Live.

REBEL STAR: THE SUN'S GREATEST MYSTERIES

CURRICULUM POINTS COVERED - KS3/4 VERSION

- Heating and thermal equilibrium
- Non-contact forces: gravity forces acting at a distance on Earth
- Atmospheric pressure
- Opposing forces and equilibrium
- Sound waves; energy and waves; light waves
- Electricity and magnetism
- Energy in matter
- Our Sun as a star, other stars in our galaxy
- Atomic structure
- Transformers and the National Grid
- Ionisation; absorption or emission of radiation related to changes in electron orbits
- Nuclear fusion and our Sun's energy

CURRICULUM POINTS COVERED - KS5 VERSION

- Constituents of the atom
- Stable and unstable nuclei
- Particles, antiparticles & photons
- Energy levels, line spectra & photon emission
- Wave-particle duality
- Longitudinal (pressure) waves
- Conservation of energy
- Moving charges in a magnetic field
- Radioactive decay
- Mass, energy & nuclear fusion
- I-R, U-V and X-ray telescopes
- Black-body radiation (Stefan's Law)
- The use of stellar spectral classes
- The life cycle of stars
- The Hertzsprung-Russell (HR) diagram