STEM THROUGH STAMPS *Author: Katrin Raynor -Evans FRAS FRGS*



Philately or stamp collecting as it is more commonly known, provides a unique, interesting and colourful way to teach others about astronomy and space exploration.

From the first astronomy stamp issued in Brazil in 1887 to the latest UK stamps issued this year celebrating the Royal Astronomical Society's bicentenary, there is so much to learn.





The vibrant, miniature world of philately opens up a huge window to our exciting Universe.

Presentations, writing and exhibiting samples of my personal collection provide an opportunity to educate and entertain – STEM Through Stamps.



WHAT CAN PHILATELY TEACH US ABOUT ASTRONOMY ?

The stamps, the postmark and the cachet (the illustration on the left hand side of the envelope) on a first day cover unravels a factual tale about an astronomical event such as, the return of Halley's comet in 1985.

The silk cachet depicts a refracting telescope manufactured by well-

known optical instrument maker, Peter Dolland in 1770.

One of the Dolland telescopes sailed with Captain Cook in 1769 for observing the transit of Venus.



Each stamp brings to life the story of the comet (clockwise L to R):

- 1. Giotto spacecraft approaching the comet
- 2. Edmund Halley as the comet
- We may see the comet twice in our lifetime
- 4. The comet orbiting the Sun and planets

A pictorial postmark of a telescope cancelled the stamps - London Planetarium 18th February 1986 – the date the stamps were issued and 9 days after the comet's perihelion

THE BENEFITS OF PHILATELY IN ASTRONOMY EDUCATION

Research

- Information on the stamp or first day cover inspires me to research the topic further and in depth
- Expanding my knowledge of astronomy and space exploration enables me to teach others efficiently and correctly

Presenting

- Reaching a wide audience on-line for free
- Accessible to everyone
- Attending astronomical societies, building connections and reaching a varied demographic
- Hands-on taking philatelic material along to talks allowing people to explore and understand



Cygnus A is 600 million light years away



Copernicus formulated that the Sun , not the Earth is at the centre of the universe

Publications

- Promoting astronomy through the medium of philately in popular magazines
- Reaching a wider audience geographically such as Europe and the United States
- Providing an historical astronomical guide for people to refer back to
- Stimulating readers with a passion for astronomy, history and philately

Exhibiting

- Attending outreach events at local museums, schools and astronomy meetings
- Talking to large numbers within a wider demographic including young people and children
- Inspires others
- Fun way of learning for younger astronomers

STEM THROUGH STAMPS ACHIEVEMENTS & THE FUTURE

Achievements

- Promoted the subject of astronomy through philately through publications in the UK and US in popular astronomy magazines and on websites
- Attended local outreach events exhibiting selected parts of my collection
- Appeared on radio to discuss and promote the subject
- Presented on-line
- Used social media to encourage and inspire others to get involved
- Winner of a prestigious philatelic competition detailing the 1969 Moon landing through philately









And the future?

- Attendance at outreach events and schools
- Talks for astronomy societies in the UK
- The National Astronomy Meeting in Bath to exhibit and discuss philatelic material
- Continue a social media presence
- Inspire and educate whenever I can
- Maybe a book or two? Watch this space!