

## **2022 / 2023 Science and Technology Programme. Speakers and their Subject.**

<b>28 Sept 22</b>	<b>Rodney Wilkinson, Skipton/Craven u3a</b>	The topic is the control of biological and chemical weapons and how the international agreements are not effective.
<b>12 Oct 22</b>	<b>Dr Paul Holmes</b>	A focus on the latest images from The James Webb Telescope (launched on Christmas Day 2021) and the Event Horizon Telescope (which images supermassive black holes), as well as the latest Solar System news.
<b>26 Oct 22</b>	<b>Dr Richard Elwes</b>	The science of geometry and the art of optimisation. ie the process of making something as good or effective as possible:
<b>9 Nov 22</b>	<b>Professor Tony Axon</b>	Endoscopy. Our speaker is a world renown expert in his subject. Professor Axon joins us thanks to a personal connection with one of our members. NB. A change to the original published programme.
<b>23 Nov 22</b>	<b>Professor Rick Batterbee</b>	Using an analysis of arctic ice cores to establish the varying levels of CO <sub>2</sub> (and others) over the centuries and the more immediate changes along with the consequences.
<b>7. Dec 22</b>	<b>Paul Satow</b>	Domestic Heat Pumps are a relatively new technology in the UK although they are widely used in Scandinavia and many parts of Europe. A heat pump takes energy from outside and transfers it into heat to be circulated around a heating and hot water system.

**The speaker programme continues after seasonal break. Scroll down for details.  
We also hope to arrange some visits during this year.**

<b>18 Jan 23</b>	<b>Rachel Hirst</b>	Rachel Hirst is an Occupational Therapist,
<b>1. Feb 23</b>	<b>Geoff Howard (member of our u3a)</b>	Rosalind Franklin and how she played an essential part in the discovery and mapping of DNA and was not recognised at that time for this. That went to others i.e. men.
<b>15 Feb 23</b>	<b>Chris Freeman</b>	'History by Design' -----A relatively light-hearted talk on how function and history have led to the design of objects from pyramids to railways
<b>1 Mar 23</b>	<b>Members</b>	We welcome short presentations from members on scientific and/or technological subjects which are likely to be of interest to our membership group.
<b>15 Mar 23</b>	<b>Professor Mike Pilling. (member of our u3a)</b>	Serendipity refers to scientific developments that are made by accident but that require wisdom to recognize their importance. We'll look at some examples, including the discovery of X-rays and the observation of the Antarctic ozone hole.
<b>29 Mar 23</b>	<b>Andy Botherway. (member of our u3a)</b>	Cecilia Payne was an English astronomer who worked in America in the 1920's. Working intensely and largely alone for years, she discovered how stars are formed. She met fierce opposition from the largely male fraternity but in the end proved them to be very wrong.