

STAR PROGRAMME 2023

All meetings at 2-00pm in the Keyworth Methodist Church

Monday 5th June 2023:

Professor Kim Thomas - Professor of Applied Dermatology Research at University of Nottingham will be giving a talk on "Eczema"

She will be supported by **Amanda Roberts (one of her patient partners)** who will come along and they'll talk about their recent eczema research and ongoing projects.

Extract

Kim Thomas, Professor of Applied Dermatology Research at the Centre of Evidence Based Dermatology in Nottingham and Amanda Roberts, a person with lived experience of eczema will be talking about exciting developments in the field of eczema research. Eczema is an itchy, inflammation of the skin which affects 1 in 5 children and 1 in 10 adults, so you are very likely to know people with eczema.

The talk will focus on two programmes of research:

1. A recently completed study evaluating Eczema Care Online (www.EczemaCareOnline.org.uk)
2. A new programme of research based on citizen science approach to delivering innovative eczema trials (www.RapidEczemaTrials.org)

Monday 3rd July 2023:

Professor Thorsten Allers of University of Nottingham

Will be giving a fascinating talk with the title: " Archaea and the Meaning of Life "

Extract

Genealogical research can lead to unexpected discoveries.

Until the 1970s, the tree of life had two major branches: prokaryotes and eukaryotes. Then, a third form of life was discovered.

Archaea are strange micro-organisms that inhabit some of the most hostile environments on the planet. They are superficially similar to bacteria – both are unicellular, microscopically small, and have neither a nucleus nor organelles. But on a deeper level, archaea and eukaryotes are much more closely related to each another than they are to bacteria.

In fact, recent discoveries suggest that we, and all other eukaryotes, are the direct descendants of archaea.

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Monday 7th August 2023:

David Boon of BGS will be giving a talk with the title:

" Geothermal energy – can the heat under our feet power us through to a NetZero economy?"

Extract

Geothermal energy has long been touted as an renewable energy resource for the UK, but until now failed to get off the ground. With the energy transition firmly underway, a fresh bout of volatile fossil fuel prices - in part driven by post-pandemic demand and the war in Ukraine - is now the time for UK geothermal energy to take to the stage?

To help us ponder this question, we welcome a talk from David Boon, a geothermal geologist from the British Geological Survey. He will start with an explanation of what technology involves, then take a tour of the history of research and development in the UK, highlight the latest innovations, and finish with a look at the new generation of projects coming on stream. He will also discuss the differences between 'medium and deep geothermal' – drilling down beyond >500m and up to several km's in search of higher temperatures (>30 – >200 degrees Celsius) - and 'shallow geothermal' also known as 'ground source heat pumps', which are gaining pace as a high energy-efficiency solution for electrifying heating of buildings, industry, and community district heat networks.

Monday 4th September 2023:

Paul Fileman of Soar Valley U3A will be giving a talk with the title:

"Hydrogen Power"

Paul is an old friend of STAR Group and has, previously, given us a number of very good talks.

Extract

We will explore historic uses of Hydrogen, how it is used in the 21st Century including Hydrogen Fuel Cells. We will look at the use of Hydrogen in cars, rail, marine, heavy goods vehicles and air transport. We will also look at how hydrogen is "manufactured", stored and distributed and finally a review of the green credentials of hydrogen in transport and industry.