Welcome to Fascination, a fortnightly behind-the-scenes look at our labs, facilities and funded research, and the breakthroughs they bring.

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Space cowboys - the lone rover

The Tabernas Desert in Spain has played a starring role in old ‘Spaghetti Western’ cowboy films such as *The Good, the Bad and the Ugly*. Last week it became a little more sci-fi as it played host to Mars rover field trials. The rover, Charlie, was being remotely controlled by a team a thousand miles away at STFC RAL Space’s Mission Operation Centre in Oxfordshire.

Apprentices - you’re hired!

The first intake of apprentices will be welcomed to the new Oxfordshire Advanced Skills (OAS) training centre at Culham Science Centre in September 2019. The development, funded by STFC and UK Atomic Energy Authority, will equip up to 350 apprentices a year with technical skills required for the local economy, and will cover a wide range of engineering and technology disciplines.

Mystery of the decaying ‘Emperors’

It is a mystery worthy of Scooby Doo and the gang – why a set of busts, known as the Emperors, crumbled beyond recognition within a few short decades when their predecessors endured for two centuries.

SFTC’s ISIS facility has been recruited to get to the bottom of the mystery.
Computing your future

Last week we inspired over 400 families with STFC’s computing science. Doors at Daresbury Laboratory and Rutherford Appleton Laboratory were open with fun-packed, hands-on activities available to inspire the next generation of computer whizzes.

From coding robots to virtual reality, families immersed themselves in science.

Attack of the mutants!

When the cells in our bodies mutate, they can go haywire and multiply uncontrollably to form cancerous tumours. The Central Laser Facility’s OCTOPUS facility has been used to study these mutations, improving our understanding of how they happen and the effect they have – potentially leading to new cancer treatments in the future.

Space technology builds the ‘daddy’ of travel cots

A travel cot developed using space technology at the ESA BIC UK has scooped a Dadsnet Gold product award – voted for by dads! Based on technology designed to unfurl space satellites 30,000 miles above the earth, the SpaceCot weighs less than 6 kilos, and can be folded up or down, with one hand, in three seconds.

Inspiring STEM futures

Last week’s STEM Inspiration Awards celebrated the outstanding efforts of individuals and organisations up and down the UK to inspire young people to study STEM subjects and consider careers in STEM. STFC sponsors the awards, offering the winners a behind-the-scenes, once-in-a lifetime visit to CERN, home of the Large Hadron Collider.

A tale of two tunnels

The University of Liverpool has launched a new project to connect residents to the world-class science taking place on their doorsteps, and to tell them more about their city’s work with particle accelerators. The Tale of 52 million volt milestone

Recently, STFC’s Daresbury Lab was contracted to build a testing and assembly centre for Advanced Oncotherapy’s breakthrough radiotherapy technology, which will reduce the cost and improve the
Two Tunnels will be a unique science trail, telling the story of a particle accelerator built in Liverpool.

The technology, which originated at CERN, recently reached a major 52 million electric volt milestone in its development.

STFC celebrated Dark Matter Day on 31st October. Here’s a round-up from our Dark Matter Day social media campaign.

#HappyHalloween! It is #DarkMatterDay today with celebrations taking place across STFC sites and the ⬇️

Join our underground laboratory today at 3pm for the UK’s official #DarkMatterDay #FacebookLive

Rutherford Appleton Laboratory welcomed over 150 primary school students on site today for Dark Matter Day. Take a look at what the students imagine dark matter particles to look like and an inspiring live link up to Boulby Lab! #DarkMatterDay #HappyHalloween

The #DarkMatterDay celebrations are underway at the family #scienceexhibition at Our Dynamic Earth in #Edinburgh. Come along to find out more about the mystery that is #darkmatter before 4pm today.
What is it that you know is there, but can't see; and is all around us, but can't touch? No it's not a ghost... it's #darkmatter! Find out more about this mysterious substance with our dark matter crib sheet!

Join us live at 3pm, underground at Boulby Laboratory for #DarkMatterDay. Join the hunt and don't be afraid of the dark!