**“Astro Academy: Principia” - National Space Centre education kit reaches International Space Station**

The UK wide National Space Academy, which has its headquarters at the National Space Centre, has for the first time sent a payload to the International Space Station (ISS) – the kit for its international human spaceflight education programme **“Astro Academy: Principia”**. This mission, part of the education remit of ESA’s first British astronaut, Tim Peake, will link school science with experiments conducted on board the International Space Station.

The **Astro Academy: Principia** kit of experiments arrived today (Friday 5th September) at the ISS for Tim to use during his 6-month mission in space.

Launched from Kazakhstan on Tuesday on board the Soyuz TMA 18-M mission, the kit was funded by the UK Space Agency and designed and built by the National Space Academy. Flight-testing for space launch was carried out by the University of Leicester’s Space Research Centre. The original launch of the kit in June ended in disaster when Space X’s Falcon 9 launcher was destroyed after a catastrophic failure of its upper stage.

**‘Astro Academy: Principia‘** is an ambitious science education programme using the unique microgravity facilities on board the ISS to conduct experiments and demonstrations that are impossible on Earth. After his own launch on December 2015, Tim will film himself doing the experiments and these films will form a suite of freely available teaching films and accompanying teacher education guides that will be released in 2016.

The National Space Academy is now tasked with sharing the science of Astro Academy: Principia at a local as well as national level, through student masterclasses and teacher training for the region, available through booking with the National Space Academy (nsa@spacecentre.co.uk)

Jeremy Curtis, Head of Education at the UK Space Agency, said:

“*We’re excited that Tim will be able to carry out demonstrations in space to help teachers explain science to their students. His videos and other teaching materials developed by the National Space Academy will be available from summer next year*.”

The narrative for each film will also showcase many of the successes of the UK’s own space industry – which employs over 30 000 people and generates more than £11 billion per year for the UK economy.

National Space Academy Director Anu Ojha OBE said:

 *“Our ambitions for* ***Astro-Academy:Principia*** *are bold – to deepen the curriculum understanding of physics and chemistry students, to support teachers in their curriculum programme delivery and to take advantage of the unique microgravity classroom we have aboard ESA’s Columbus module of the International Space Station.*

The University of Leicester’s Space Research Centre (SRC) led the flight qualification testing of the **Astro-Academy: Principia** payload. The SRC team, led by Professor Mark Sims (SRC Director and also a Director of the National Space Centre), conducted the essential vibration tests that were needed to prove that the payload could survive launch

**Notes for editors**

1. **Tim Peake**

Tim Peake will be the first British ESA (European Space Agency) astronaut to live and work on the ISS. His mission, named Principia after Newton’s world-changing three-part text on physics, Philosophiæ Naturalis Principia Mathematica, is scheduled to begin in December 2015. Whilst on-board the ISS he will be using the unique environment of space to run experiments as well as trying out new technologies for future human exploration missions.

1. **Flight qualification testing**

The flight qualification testing carried out by the University of Leicester’s Space Research Centre (SRC) was critical in getting the experiments accepted for launch as part of the NASA and ESA (European Space Agency) safety review. The vibration testing of the payload was carried out using facilities at RAL-Space at the Harwell Campus near Didcot.

**UK Space Agency (**[**www.gov.uk/government/organisations/uk-space-agency**](http://www.gov.uk/government/organisations/uk-space-agency) **)**

The UK Space Agency is at the heart of UK efforts to explore and benefit from space. It is responsible for all strategic decisions on the UK civil space programme and provides a clear, single voice for UK space ambitions.

**National Space Academy (**[**www.nationalspaceacademy.org**](http://www.nationalspaceacademy.org) **)**

The National Space Academy is the largest space education and space skills development programme in the UK. The programme utilises contexts from astronomy, space science/engineering and Earth Observation Science to boost student attainment and teacher effectiveness in curriculum science, mathematics and engineering at secondary school level and above.

Led by the National Space Centre, funders include the UK Space Agency, STFC, Satellite Applications Catapult, ESA (the European Space Agency), Lloyds Register Foundation, Ogden Trust and various space and aerospace sector companies.

With core teams at the National Space Centre and Harwell, the programme also uses a network of more than 25 outstanding current secondary teachers (“Lead Educators”) across the UK who work with current space sector scientists and engineers to deliver intensive student masterclasses for more than 6000 students per year at secondary level, as well as targeted teacher training and continuing professional development (CPD) courses.

**University of Leicester Space Research Centre (**[**https://www2.le.ac.uk/institution/space/space-science**](https://www2.le.ac.uk/institution/space/space-science) **)**

The [Space Research Centre](https://www2.le.ac.uk/departments/physics/research/src) (SRC) is part of the University of Leicester’s Department of Physics and Astronomy. The University of Leicester has been involved in Space Research for over 50 years and every single year since 1967 has seen a Leicester-built instrument operating in space ([www.le.ac.uk/space](http://www.le.ac.uk/space)).

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