



 **DESTINATION  
SPACE!**  
*#jointhecrew*

**Big Launch Event**

Tuesday 15th December 2015

# Big Launch Event!

You are welcome to join us at W5 anytime during the day, but come 15:00 on Launch Day a range of activities specifically aimed at the public will be available for you to take part in.

As part of our celebration on launch day, W5 is offering free admission\* for any child dressed as an astronaut on the 15th December 2015 when accompanied by a fee-paying adult.

The building will be filled with talks, activities, workshops, competitions and photo opportunities which means that there will be something to suit people of all ages.

Tim Peake will be launching into space at 11:03 and Tim's activity will be live streamed around W5, allowing everyone to view this spectacle as it occurs.

Participation in these interstellar activities will be included in your ticket price!

## Walk-up Activities

### Lift-off – 11:03

- Live Stream of Tim Peake leaving Earth to begin his 6-month Principia mission throughout the day.

### Scientific Sue

- One hour interactive shows by Scientific Sue which explores how planes and rockets fly and occasionally go into space.

### Queen's University Belfast

- Ask an Astronomer Booth - we'll take any question on space, and give an answer, sometimes the right one.
- Play dough Solar System, linking the scale of the solar system to the sizes of the planets - how close will Tim be compared to everything else.
- Walk around thermal cameras, see the world at different wavelengths as used in space.
- Colouring Competition with space-flight themed drawings. The competition will be split into two age groups: 4-6 and 7-11. We will display the best on the QUB ARC Website and we will have prizes for the best three in each age group.
- "Mars Tweet" competition: What would be your first words if you were to land on Mars (for secondary school). Prizes for the best three.

### Vital Nutrition (Event for adults)

Inside the International Space Station, there are ground breaking medical experiments going on that could impact your health now and in the future. Vital Nutrition's Jane McClenaghan takes a closer look at how the latest discoveries in space are impacting on our diet and lifestyles.

- Discover how ISS is helping develop new strategies for conditions such as cancer, cardiovascular disease and asthma
- How the ISS helps advance nutritional knowledge - the influence and findings of ISS on food production, harvesting and preservation
- Find out how research in space is influencing local food production, and what this could mean for farmers and food producers in NI.

### Titanic Ocean Exploration Centre

These demonstrations and exhibition show the importance of understanding our oceans, and ocean exploration technology, with respect to exploring space. This event will encompass a mini-exhibition of didactic panels (Space2Sea) touching on subjects including:

- Telepresence: Bringing deep sea expeditions to you in real time
- Satellite Navigation via GPS
- Satellite imaging and global monitoring
- Seabed mapping and
- Remote sensing and data analytics and their use in exploring the world's oceans

In keeping with the ocean's link to space, the Ocean Exploration Centre learning crew from Titanic Belfast will host demonstrations on how water is recycled on-board the International Space Station – making tomorrow's coffee from yesterday's coffee!

The team will also look at why astronauts use underwater habitats to prepare for life in space, questioning the physical properties of the marine environment which make it such a suitable training ground to prepare for space missions. In this component, we will compare and contrast the features of both the Space Suit and the ExoSuit (used for deep sea exploration).



# Activities

## with limited capacity

The events listed here are all subject to availability. Should you wish to attend any of these activities, spaces will be allocated on a first-come, first-served basis.

### W5 Destination Space Show

- Join W5 as they take you out of this world with an interactive lecture theatre show specially developed with help from the European Space Agency and the UK Space Agency.
- Explore what life is like for the entire space crew in our Destination Space Lecture Theatre Show celebrating astronaut Tim Peake's mission to the International Space Station (ISS) in December. With amazing demonstrations and supersonic science experiments including building rockets, launching astronauts and learning about life on the ISS, this awe inspiring show is an out-of-this world experience not to be missed!

### Northern Ireland Space Office

- Space Exploration in 3D show

### Docking with ISS

- Live Stream of Tim Peake docking into the ISS compered at 17:00 by Robert Hill.

### Northern Ireland Space Office/W5/UK Space Agency

- An Audience with an Astronaut at 18:00 – presentation and Q&A session with Jean-Francois Clervoy

### Culture Tech

- A full-day drop-in workshop suitable for all ages but particularly focused on young people. The workshop will explore life in space and include elements of diet, clothing, personal hygiene, sleep, exercise, illness and entertainment. Participants will learn about each of these factors and then be set the task of designing (in teams) their very own space station in Minecraft. The workshop to suit the numbers of participants at W5. CultureTECH will supply all resources, including hardware for up to 40 participants at a time.

### STEM Aware

- Following a presentation on Rockets, groups will be invited to design their Rockets on paper and then build it using Lego. Within a time limit and working as team, balance, height and aesthetics must be fully considered. The tallest free standing rocket that has included the main components of a rocket, will win.

### Queen's University Belfast

#### The Sun for Astronauts - Ryan Milligan (30 minutes)

Aimed at P11–P14 secondary school children. One of Tim Peake's experiments is planned to be observing the Sun. This talk will explain what we know about the Sun, and why astronauts need to understand it.

#### Planeterrella

Real life demonstration of aurora as seen by astronauts on ISS.

#### Let's go to Mars! – Alan Fitzsimmons (30 minutes)

For P11–P14 secondary school children. One reason to live on the Space Station is to help plan for sending astronauts to Mars. This talk will explain what we know about Mars, and why one day we will send astronauts there.

