

Busy spacecraft and experiment schedule on Space Station

April 11 2016



Spacecraft berthed to ISS. Credit: ESA/NASA

With less than two months left aboard the International Space Station, ESA astronaut Tim Peake has been exceptionally busy with experiments and arriving spacecraft. Tonight, the third supply vessel for the space



laboratory in three weeks will be launched and Tim will be at the helm to berth it on Sunday.

On 26 March, NASA astronaut Tim Kopra used the Station's 17 m-long robotic arm to grapple and berth a Cygnus cargo craft, with Tim Peake monitoring the approach, communicating with ground control and commanding the vehicle.

On 2 April, a Russian Progress docked itself to the Station after its predecessor had left three days earlier filled with waste.

This Sunday, Tim Peake will take the lead in berthing the eighth Dragon supply ship using the Station arm from 10:30 GMT.

Each new ship brings food, equipment and experiments that must be unloaded and stored. Some experiments need to be moved quickly into a freezer, or run as soon as possible before the contents perish.

Blood vessels in space

One experiment on Dragon will try to grow blood vessels in space. Spheroids is a biological experiment involving human cells found on the inner layer of blood vessels. These endothelial cells are in direct contact with the blood and regulate factors such as blood pressure.

Ground research suggests it might be possible to grow tube-like cell cultures that resemble small, rudimentary <u>blood vessels</u>. Spheroids aims to understand why and how <u>endothelial cells</u> form these structures, and how they will adapt to microgravity.





Grappling Cygnus. Credit: ESA/NASA

Unloading the new experiments and supplies will see Tim Peake and his five crewmates work through the weekend and into next week.

Follow ESA's Principia blog for updates and to watch the launch and berthing of Dragon live via NASA television.





ESA astronaut Tim Peake is pleased to have received fresh fruit with the arrival of his new crewmates on the International Space Station. Tim commented on the picture: "Thanks Soyuz 46S crew for the fresh fruit...nothing quite like a juicy apple!" Credit: ESA/NASA

Provided by European Space Agency

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