LASER WEEKLY NEWSLETTER

The Olympus Rover Trials team have completed working out the instrumentation that will be carried on the rover, and are moving onto how that instrumentation will be moved. Tashu has utilised digital sketching to complete a conceptual design, and is looking to finalise the chassis and body design in CAD. Furthermore, The computing team has created a simulation of the LIDAR and the six ultrasonic sensors that will enable the rover to navigate the environment. Their hard work and innovative thinking continue to drive them toward their mission goals.

Section written by: Peter B. Swift

The Unity Rise Team has been hard at work finalising their Preliminary Design Review for the National Rocketry Championship, a critical step showcasing their initial concepts and engineering plans. They are preparing to shift their focus toward the Critical Design Review, scheduled for late February. This next phase will involve refining their designs, addressing detailed technical requirements, and ensuring the project meets rigorous standards as they continue their journey toward competition success.

The Galactic Grannies, our team for the Satellite Design competition, have been steadily progressing toward their goals. Recently, they've been sourcing key components and carefully developing a reaction wheel to ensure precise stabilisation for their CubeSat. The team's efforts have laid a solid foundation, and they are now preparing for the next major milestone: the Critical Design Review. With each step they bring their vision closer to becoming a reality.

Upcoming Events:

CAD Workshop:
-Wednesday 4th of December, 2pm, HHTC

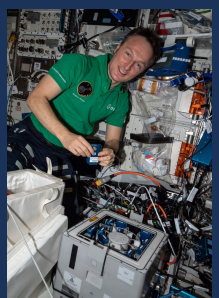
3D Printing Workshop:
-Wednesday 4th of December, 3:45pm, Laser Lab

On November 22, 2024, Blue Origin successfully launched its 28th New Shepard mission and ninth human spaceflight. Among the six-member crew was Emily Calandrelli, "The Space Gal," who became the 100th woman to fly to space. The flight was a 10-minute suborbital journey with four minutes in space, offering stunning views and weightlessness. Phil Joyce, Senior VP of New Shepard, emphasized the mission's role in inspiring future generations in STEAM fields. Blue Origin's vision is to build a sustainable road to space for the benefit of Earth. Blue Origin's achievements remind us of the limitless potential of human innovation and the importance of inspiring curiosity. Each flight represents a step forward in space exploration and a challenge for the next generation to dream big and push boundaries. For more on Blue Origin's work or to explore flying with them, visit BlueOrigin.com.

The NS-28 Crew (left to right): Sharon Hagle, Marc Hagle, Emily Calandrelli, J.D. Russell, Hank Wolfond, and Austin Litteral.

Section written by: Elyazia Alghool

This week, we welcomed Special Guest Speaker Rovin Perez from Kayser Space Ltd, an SME that delivers innovative hardware supporting technological research in space. Rovin shared fascinating stories about his many student projects at university and provided valuable insights into his career journey. He also spoke about the ground-breaking MicroAge and MicroAge-2 experiments, which study the molecular mechanisms of muscle loss with exposure to microgravity - a critical area of research for long-duration missions. To top it off, Rovin brought along the actual MicroAge hardware, which has been in space, giving us a rare opportunity to see it up close. It was an inspiring session that offered a unique glimpse into the world of space research.



'Make connections, it's not always about winning' - Rovin Perez