



# LASER WEEKLY NEWSLETTER



LASER is the Liverpool Association for Space Engineering and Research. We are a student-run engineering society based in the Electrical and Electronics Engineering Department.

This week we had the privilege of welcoming Special Guest Speaker Kyle Wright, a graduate Reliability Maintenance Engineer at Cummins Inc., a US based company that designs, manufactures and distributes engines. Kyle shared his pathway into Engineering and all the amazing extracurricular work he completed outside of his studies, and outreach work which he continues today. He highlighted the importance of finding placements and roles that align with who you are, and top tips for securing placements.



On November 28, 2024, China announced its "Beidou Satellite Navigation System Development Plan before 2035," outlining ambitious goals to advance its satellite navigation technology. The Beidou system, named after the Chinese term for the Big Dipper constellation, is a global navigation satellite system (GNSS) developed to provide positioning, navigation, and timing (PNT) services. The next-generation Beidou satellites will operate across geosynchronous, medium, and low Earth orbits, ensuring greater coverage and precision. With full deployment expected by 2035, this plan cements Beidou's role as a key player in the global satellite navigation network.

Section written by: Elyazia Alghool

## Upcoming Events:

CAD Workshop:

-Wednesday 4th of December, 2pm, HHTC

3D Printing Workshop:

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

Society Winter Social:

-Saturday 7th of December, 8am-12am, TBC

Wirral UK Unplugged Christmas Unplugged Pop Up:

-9th - 13th of December, 10am-4pm, 19

Abercromby Square

LASER Merch will be available to order soon!

Hoodies available in sizes L - XXXL £40-£25

All hoodies include a free ruler

Ruler is £2



Rover team one have now decided on a step motor for steering. However, a final decision has not yet been made on the main motors of the rover as well as the wheels and suspension. Rover team two have two competing designs, and the final design is likely to be a compromise between the two. Both designs will use a Raspberry Pi 3. Both teams are playing it close as they wait to send off the design synopsis to competition authority soon.

Section written by: Peter B. Swift

The Galactic Grannies have ordered their components to assemble the reaction wheel - a critical part of the CubeSat for stabilization. The next steps are bringing their vision to life as their competition journey continues.

Unity Rise have now submitted their Preliminary Design Review, taking a step towards their final product and competition success. They are putting in dedicated effort in preparation for the Critical Design Review.



Last Wednesday, we had the pleasure of welcoming the Moruzzi family to view our LASER Lab and see what we have been getting up to recently. We are incredibly thankful for their generous donation which will go a long way in funding student-led projects.



'Scientists investigate that which already is;  
Engineers create that which has never been' -  
Albert Einstein (allegedly)