

## **S5LAB ACTIVITIES PRESENTATION**





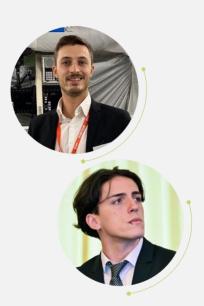
### Riccardo Garofalo (PhD Student)

## S5Lab Space Systems: CubeSat Development and Student Activities

"The development of CubeSats is one of the main tasks undertaken by the S5Lab (Sapienza Space Systems and Space Surveillance Laboratory), a laboratory at the University of Rome La Sapienza. The goal is to design, develop, test and assembly satellites, then operate them once in space with the goal of both research and educational activities involving professors, researchers, and students."



**S5Lab Space Surveillance: Observatory Network and Activities** "Space surveillance operations are conducted at Sapienza S5Lab, utilizing a worldwide network of telescopes across four continents. Our focus lies in characterizing, monitoring and cataloging space objects and debris, aiming to ensure orbital safety and foster sustainable space activities."



## Angelo Fabbrizi (MSc Student) Lorenzo Chiavari (BSc Student)

#### From Caves to Space: The Sapienza GEA Project

"Through speleology analog missions, the GEA project aims to develop innovative technological solution to foster human exploration of the Moon. The project is led by students of S5Lab at Sapienza University of Rome and represents a valuable catalyst for developing opportunities for collaboration with companies from different sectors of the space economy."



### Alessia Di Giacomo (PhD Student)

#### Miniaturized two-phase cooling systems for space applications

"InQuattro is a new Italian startup engaged in the realization of a novel kind of thermal control management system for space applications. In particular, the main studies and activities are focused on the design, the implementation, and the integration in a CubeSat platform of a new miniaturized cooling system, based on a biphase fluid, with the aim to replace state of art technologies."



Clara Di Nunzio (MSc Student) Lorenzo Cimino (PhD Student) Sidhant Kumar (PhD Student)

# S5Lab and the REXUS/BEXUS Programme: ROMULUS and RETINA experiments

"S5Lab is for a long time committed to test novel technologies with stratospheric experiment through the REXUS/BEXUS programme, sponsored by the DLR, SNSA and ESA. ROMULUS and RETINA experiments will be presented together with their lessons learned."