




## LANDING ATTITUDE AND SPECTROGRAPHIC ANALYSIS FOR GROUND NAVIGATION AND ASTEROID EXPLORATION (LASAGNA-E)



-  **SCHOOL:** SEWANHAKA HIGH SCHOOL
-  **LOCATION:** FLORAL PARK, NY
-  **FLIGHT PROVIDER:** ASTROBOTIC
-  **GRADES:** HIGH SCHOOL

### STUDENT EXPERIMENT DESCRIPTION

Our experiment, LASAGNA-E, aims to develop technology for identifying safe landing zones on the lunar test field surface using various sensors, an IR camera, LIDAR, spectrometer, and IMU. Our hypothesis is that these systems can identify hazardous terrain, allowing us to locate safe landing zones. We were inspired to develop this due to the current failure rates among lunar missions. By measuring descent angles and mapping the landing surface, our project seeks to enhance mission success rates.