



PLACE A HOUSE ON THE MOON WITH US

*Diploma work: Securing the safe deployment of the Moonhouse
Developing and validating surface topology constraints for placement site selection*

The Moonhouse is an art project where a miniature house will be placed on the Moon's surface.

At the end of a journey of 400 000 km it is still crucial that the final leg of the journey, travelling the last 10 cm in free fall from the spacecraft to the lunar surface, be studied carefully to ensure the successful deployment of the house on the surface of the moon. With launch approaching rapidly, mission operations come into focus. There is latitude in the mission to select the deployment site in the vicinity of the carrier spacecraft landing site and the selected site should maximize the probability of a successful deployment of the Moonhouse.

The objective of this thesis is to arrive at quantified constraints on the deployment geometry and surface topology. In order to do this, parameters for deployment geometry and surface topology should be defined and the deployment dynamics modeled or simulated. From this analysis preliminary constraints should be decided and then verified in sand box tests using a representative Moonhouse model. The validated constraints will be used in the deployment operations on the Moon.

Start: August 2024 or earlier

Duration: 6 months

Applications should be sent to emil.vinterhav@themooncorp.com. We aim to fill the position before summer.

