

Abstract: CubeSats are small satellites of roughly 10cm in three dimensions. They are deployed for tasks such as technology demonstration and scientific research. In our group, CubeSats implement and simulate the spacecraft that are used for Quantum Space Applications. An associated challenge is precision Rendezvous and Proximity Operations, Docking, Undocking (RPODU). Computer vision techniques such as Optical Tracking and Visual Structure from Motion (vSfM) can be used for such procedures like formation flying of spacecraft in a constellation.