QTX-8 Workshop on Quantum Technologies on Small Satellites

-- Tentative Workshop Program --

Day 1 (Monday, August 5th)

08:30 – 09:00 *Registration and Welcome*

Session 1: Missions and payloads

09:00 – 09:30 Tobias Vogl (TUM): QUICK^3
09:30 – 10:00 Paolo Villoresi (UPadova): Small payloads for space quantum communication
10:00 – 10:30 Markus Krutzik (HUB): Atomic devices for timing, sensing, and networking applications

10:30 – 11:00 *Coffee break*

Session 2: Missions and payloads II

11:00 – 11:30 Thomas Bäumer (SES): EAGLE-1
11:30 – 12:00 Lukas Knips (LMU): QUBE and QUBE2
12:00 – 12:30 Erik Beckert (IOF): CubEniK

12:30 – 13:30 *Lunch break*

Session 3: Optical ground stations

13:30 – 14:00 Kimia Mohammadi (UWaterloo): Overview of the Waterloo ground station for QEYSSat build
14:00 – 14:30 James Grieve (TII): Recent activity at the Abu Dhabi Quantum Optical Groundstation (ADQOGS)
14:30 – 15:00 Hannah Thiel (UVigo): An optical ground station on the western coast of Europe
15:00 – 15:30 Ayesha Reezwana (NUS): An optical ground station for quantum communication in Singapore

15:30 – 16:00 *Coffee break*

Session 4: Posters

16:00 – 18:00 Kumar Nilesh (TUM): Information theoretic analysis of authentication based on quantum PUFs

Henri Morin (UWaterloo): Performance estimates for QKD with single photon emitters for ground to QEYSSat transmission

Gianluca Santis (TII): ADQOGS: a versatile optical ground station for quantum communications in Abu Dhabi

Mostafa Abasifard (TUM): QKD in daylight conditions

	Armin Hochrainer (qtlabs): qtlabs and space QKD
	Chanaprom Cholsuk (TUM): Quantum memories with solid-state quantum emitters
	Anand Kumar (TUM): Solid-state quantum emitter for space applications
18:00 – 20:30	*Workshop dinner*

Day 2 (Tuesday, August 6th)

Session 5: Light sources and detectors

09:00 – 09:30	Fabian Steinlechner (IOF): *Title TBD*
09:30 – 10:00	Michael Hofbauer (TUVienna): Integrated Multi-channel SPAD Receivers
10:00 – 10:30	Sheng-Kai Liao (USTC): The radiation effect of the silicon avalanche photodiode single-photon detectors in Micius
10:30 – 11:00	Eammon Murphy (ESA): *Title TBD*
11:00 – 11:30	*Coffee break*

Session 6: Industry

11:30 – 12:00	Martin Bohmann (qtlabs): qtlabs and its optical ground stations – an overview
12:00 – 12:30	Danny Kim (HRL): *Title TBD*
12:30 – 13:00	Philip Menz (qssys): Development of a P&M QKD source for space with TRL 6
13:00 – 14:00	*Lunch break*

Session 7: Quantum communication and quantum networks

14:00 – 14:30	Magdalena Stobinska (UWarsaw): Long distance device-independent QKD with enhanced key rates
14:30 – 15:00	Andreas Reiserer (TUM): Erbium dopants for long-distance quantum networking
15:00 – 15:30	Daniel Oi (UStrathclyde): *Title TBD*
15:30 – 16:00	*Coffee break*

Session 8: Enabling technologies

16:00 – 16:30	Till Dolejsky (DLR): Laser terminals for Cubesat based satellite QKD
16:30 – 17:00	Mate Galambus (BME): Hungarian Quantum Satellite Enabling Technologies
17:00 – 17:30	Klaus Shilling (ZfT): *Title TBD*
17:30 – 17:35	Concluding remarks

Day 3 (Wednesday, August 7th)

Visit to the DLR site Oberpfaffenhofen with their optical ground station

Schedule TBC