

## 2D and 3D sensing for mobile robots

*Tuesday, 21 March 2017 11:30 (25 minutes)*

Terabee is challenging the perception that successful navigation for drones and robots requires dense point-clouds and expensive laser LiDAR scanners. We understood that long range and fine 3D resolution is far from being the unique answer to autonomous navigation, mainly because of the calculation power required and the failure modes embedded in complex algorithms.

In this session Max Ruffo, Terabee CEO, presents an alternative approach, where fewer axis are monitored but in a safer and redundant manner. The presentation will show how we have joined basic 2D SLAM procedures with 3D mapping to solve some specific applications whilst keeping the computational demands of the solution as lightweight as possible.

The enablers of the this new concept are high performance, modular and lightweight sensing solutions that can be used in applications and locations not previously viable. These were developed with our strategic collaboration partner, CERN, for use in cluttered and complex environments.

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