

**TRACK 2: UAV / AERODYNAMICS****“HOW MANY UNMANNED AIR VEHICLES CAN FLY IN A GIVEN AIRSPACE?”**

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**ABSTRACT**

The paper examines the technicalities of multiple UAV operations from the viewpoint of the underlying flight dynamics and physical constraints of moving in a defined airspace. Simulation results are presented and possible physical laws relating the probability of collision with the UAV density, speed and size will be proposed. Implications for design of UAV air regulations with reference to CAAS guidelines and FAR part 107 will be discussed.

**BIOGRAPHY OF SPEAKER**

Dr Gerard Leng is an Associate Professor with the Mechanical Engineering Department, National University of Singapore. His research interests include flight dynamics, guidance, control and cooperative systems.