

**DEPARTMENT OF MECHANICAL ENGINEERING****SEMINAR****Online**

**Title:** Controllable micro air vehicle with only one actuator

**Speaker:** Mr. Chen Nan (PhD candidate)  
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**Date:** 28 April, 2021 (Wednesday)

**Time:** 10:30 a.m.

**Zoom Link:** 1) Link to join the meeting:

<https://hku.zoom.com.cn/j/94955110781?pwd=V2R2KzFZcGRMcHsNThvVE1oWmlBZz09>

2) Meeting ID: 949 5511 0781

3) Password: 100676

**Abstract:**

In the last two decades, there has been an increased interest in micro air vehicles (MAVs), particularly in the fields that a controllable MAV with highly underactuated characteristic. Swashplateless propulsion system (SPS) is a way to significantly reduce the number of actuators, by applying some exquisite mechanical structures in the propeller hub. It can produce horizontal forces or moments based on a cyclical acceleration and deceleration of motor. However, the SPS has not been used in a MAV with only one actuator. In this talk, the mechanism of the SPS and previous implementation in MAVs will be briefly introduced. And the structure design and flying simulation of a self-rotation MAV with the SPS will be presented.

**ALL INTERESTED ARE WELCOME**

For further information, please contact Dr. F. Zhang at 3917 7909.

**Research area: Robotics and Control**