

## **An analysis on the lift generation for Coandă micro air vehicles**

### **ABSTRACT**

A mathematical model for lift generation on a doughnut-shaped Coandă micro air vehicle is developed and an analysis on the lift generation due to Coandă effect is carried out utilizing basic principles. A degenerate two-dimensional case is also developed. The results are discussed in view of related analytical and experimental work in the literature.

**Keyword:** Circulation control; Coandă effect; Micro air vehicle (MAV); STOL; Unmanned air vehicle (UAV); VTOL