



## Aeroacoustic Investigation of Distributed Propulsion Platforms



**Objectives.** The research goal is to assess the Aerodynamic and Aeroacoustic characteristics of wings with Distributed Propulsion features, including leading-edge propellers and wingtip-mounted propellers. This configuration poses many challenges as propeller-propeller and propeller-wing interactions are both expected to influence aerodynamic forces and noise levels. The applicant may work with the following fronts:

- Experimental investigation through wind-tunnel testing of the distribuited propulsion wing model;
- And/or Computational study of low/mid fidelity simulation softwares, which will be then compared with experimental test data.

## Extra information.

- Scholarship ensured for an expected duration of 2 years on full-time commitment.
- The research is conducted as part of a partnership with Embraer, which requires weekly meetings with Embraer's engineering teams.
- Please be aware of the application deadlines for the Graduate Program in Mechanical Engineering, but feel free to contact us before the application for more specific details.

**Application.** Please contact  $\underline{hernan@sc.usp.br}/\underline{catalano@sc.usp.br}$  with attached CV and academic transcripts.