
PREFACE

The European Conference for Aero-Space Sciences (EUCASS) is organized into five main areas, each represented by its respective Technical Committee:

- (1) Flight Dynamics, GNC, and Avionics;
- (2) Flight Physics;
- (3) Propulsion Physics;
- (4) Structures and Materials; and
- (5) Systems Integration.

Each Technical Committee organizes sessions at the biannual EUCASS conference. Abstracts are solicited from research scientists and engineers worldwide and reviewed by the Technical Committees in consideration for oral presentation at the EUCASS conference and publication of the full paper in the EUCASS conference proceedings.

The Flight Physics sessions at the EUCASS 2015 conference comprised sixteen sessions and ninety-nine written papers. A subset of approximately one-fourth of these papers were selected by the Flight Physics Technical Committee for external review, revision by the author(s), and publication in this bound volume. These papers therefore represent scientific contributions of the highest quality and impact on their respective communities.

The Flight Physics Technical Committee is pleased to present this volume containing six chapters covering experimental, theoretical, and numerical aspects of flight physics. The chapters are organized alphabetically into (i) Aerodynamics; (ii) Experimental Methods; (iii) Flow Control; (iv) Nonequilibrium and Rarefied Flows; (v) Shock Waves; and (vi) Stability, Transition and Turbulence.

On behalf of the EUCASS Flight Physics Technical Committee,

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April 2017