

**ZMATH 2010b.00633**

**Hoffman, Johan; Johnson, Claes**

**The mathematical secret of flight.**

Normat. 57, No. 4, 145-169 (2009).

From the introduction: We first recall classical theories for lift and drag and then in pictures describe the new theory. We support the new theory by computational solutions of the Navier-Stokes equations, also showing that the classical theories are incorrect. We then present basic aspects of the mathematics of turbulent solutions of the Navier-Stokes equations underlying the new theory.

*Classification:* M55 N45

*Keywords:* mathematical models of fluid dynamics; Navier-Stokes equations; computational analysis