Advances in Simulation of Wing and Nacelle Stall : Results of the Closing Symposium of the DFG Research Unit FOR 1066, December 1-2, 2014, Braunschweig, Germany /

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Monografía

The book reports on advanced solutions to the problem of simulating wing and nacelle stall, as presented and discussed by internationally recognized researchers at the Closing Symposium of the DFG Research Unit FOR 1066. Reliable simulations of flow separation on airfoils, wings and powered engine nacelles at high Reynolds numbers represent great challenges in defining suitable mathematical models, computing numerically accurate solutions and providing comprehensive experimental data for the validation of numerical simulations. Additional problems arise from the need to consider airframe-engine interactions and inhomogeneous onset flow conditions, as real aircraft operate in atmospheric environments with often-large distortions. The findings of fundamental and applied research into these and other related issues are reported in detail in this book, which targets all readers, academics and professionals alike, interested in the development of advanced computational fluid dynamics modeling for the simulation of complex aircraft flows with flow separation

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