



Large Eddy Simulation in Aerospace Engineering

Guest Editor:

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Message from the Guest Editor

The idea of the numerical wind tunnel, which allows for the virtual testing of entire aerospace vehicles, is intriguing and has motivated research and development in numerical methods, turbulence modeling, and hardware architecture among others. Although direct numerical simulations of full-size aerospace vehicles will remain out of reach for the foreseeable future, large-eddy simulations promise to break into the realm of design and analysis, which has long been dominated by Reynolds-averaged Navier–Stokes simulations. Large-eddy simulations are already providing the basis for a large number of significant contributions to many areas of science broadly associated with turbulent transport phenomena. This Special Issue aims to document the state-of-the-art in large-eddy simulations for aerospace applications. Articles are sought that are representative of today’s capability of large-eddy simulations, that summarize recent developments in sub-grid stress and wall modeling, and that make projections about the future potential of large-eddy simulations and the anticipated computing and storage requirements.





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Message from the Editor-in-Chief

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