



entropy



an Open Access Journal by MDPI

Hybrid LES/RANS Simulations in Fundamental, Environmental, and Industrial Applications

Guest Editor:

Dr. Amir E. Fard

School of Engineering, Newcastle University, Newcastle NE1 7RU, UK

Deadline for manuscript submissions:

closed (10 July 2024)

Message from the Guest Editor

The developments in computational power and resources over the past few decades has led to widespread adoption of numerical simulation of turbulent flows. Due to the relatively large number of grid points needed to capture all eddies up to the Kolmogorov scale, the direct numerical simulation (DNS) of large Reynolds number flows is currently restricted to small geometries. While using coarser grids in large eddy simulation (LES), we must come up with an adequate method for modelling in order to describe dissipation. Therefore, resolved-LES is still not the best option for flows near walls. Wall-modelled LES (WMLES) is an alternative method, modelling the near-wall area with Reynolds averaged Navier–Stokes (RANS) and resolving the outer region with LES. This Special Issue aims to demonstrate recent advances in wall-modelled LES and in any other approaches that address turbulence simulation of wall-bounded flows with reasonable computational resources. Manuscripts covering the range of "hybrid" models, "wall-stress models (WSM)," and other cutting-edge approaches are encouraged.



mdpi.com/si/175474

Special Issue



entropy



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Kevin H. Knuth

Department of Physics, University
at Albany, 1400 Washington
Avenue, Albany, NY 12222, USA

Message from the Editor-in-Chief

The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

Entropy is an online open access journal providing an advanced forum for the development and/or application of entropic and information-theoretic studies in a wide variety of applications. *Entropy* is inviting innovative and insightful contributions. Please consider *Entropy* as an exceptional home for your manuscript.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High Visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [Inspec](#), [PubMed](#), [PMC](#), [Astrophysics Data System](#), and [other databases](#).

Journal Rank: JCR - Q2 (*Physics, Multidisciplinary*) / CiteScore - Q1 (Mathematical Physics)

Contact Us

Entropy Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/entropy
entropy@mdpi.com
[X@Entropy_MDPI](https://twitter.com/Entropy_MDPI)