Turbulent flows over rough surfaces

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Surface roughness is ubiquitous in engineering and environmental flows, yet predicting its effects on wall-bounded turbulence remains a central open problem. This mini-symposium brings together experimentalists and numerical researchers working on both internal and external flows to discuss recent advances in understanding and modelling rough-wall turbulence. Topics include skin-friction drag and convective heat transfer over homogeneous and heterogeneous rough surfaces. Contributions addressing other aspects of roughness effects on wall-bounded turbulence are also welcome.

Building on the discussions initiated at the First International Roughness Workshop, a particular aim of this mini-symposium is to identify and discuss potential benchmark cases that facilitate systematic comparisons between internal and external flows, as well as between experiments and numerical simulations.

