The Numerical Simulation of Fluid Flow

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Message from the Guest Editors

Dear Colleagues,

Almost every energy production process involves fluid flow. This ranges from the most obvious, like air through wind turbine blades or fuel flow in an internal combustion engine, to a secondary though still essential role like lubrication in a mechanical power transmission hub. This Special Issue aims to focus on the practical application of available methodologies and models rather than the presentation of new numerical methods.

Topics of interest include, but are limited to:

1. Simulation of turbomachinery performance;
2. Aerodynamics;
3. Compressible flow: compressors, turbochargers, steam turbines, ejectors, etc.;
4. Fluid flow in complex geometries: valves, pumps, motors, actuators, etc.;
5. Multiphase flows: open channels (flumes, weirs, etc.), cavitation, bubbles, mist, annular flows, etc.;
6. Air flow in wind turbines, buildings, etc.;
7. HVAC (heating, ventilation, and air conditioning);
8. Passive and active control of boundary layer detachment;
9. Computational aeroacoustics;
10. Microfluidics;
11. Tribology.

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Special Issue

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Message from the Editor-in-Chief

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