

MODERN IDEAS IN TURBULENCE CONFRONT LEGACY CODES

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The accurate, efficient and reliable simulation of turbulent flows in complex geometries and modulated by other effects is a recurring challenge. Often these simulations must be done with legacy codes written a generation of programmers ago. The question then becomes:

How are modern models and methods to be used in such a setting?

This talk will present one path to doing so. The new algorithms involved lead to new models of turbulence and these lead inevitably to new analysis questions.