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Sommario/riassunto

Numerical simulation is the kind of simulation that uses numerical methods to quantitatively represent the evolution of a physical system. It pays much attention to the physical content of the simulation and emphasizes the goal that, from the numerical results of the simulation, knowledge of background processes and physical understanding of the simulation region can be obtained. In practice, numerical simulation uses the values that can best represent the real environment. The evolution of the system also strictly obeys the physical laws that govern the real physical processes in the simulation region. Then the result of such simulation can have a good representation of the real environment. From the result of such simulation we can safely draw proper conclusions and have a good understanding of the system. This new book presents leading research from around the world.