Data Structures and Algorithms for Simulation in Dodecahedral Topology

Both networks with hexagonal topology in 2D and networks with dodecahedral topology in 3D have a lot of properties, which should generate new results in the case of diffusion simulation with chemical reaction and other applications. A design of data structures and algorithms for real system simulation is the main subject of research together with following implementation with easy formulation of individual mathematical model. Knowledge of numerical methods for partial differential equation solving and ability of efficient implementation in the Matlab environment are required.