

Topics for the Computational Project

1. Percolation and its applications
{Languages: Fortran or C++} {Category: Physics, polymer science, and other technologies}
2. Differences between object oriented and procedural programming
{Languages: C++} {Category: Physics and software}
3. Maximum entropy
{Languages: Fortran or C++} {Category: Physics and computation}
4. Genetic algorithm and optimization program
{Languages: Fortran / C} {Category: Physics, math, and other sciences}
5. Chua circuits
{Languages: Fortran / C} {Category: Physics and electronics}
6. Heart physiology and its modeling
{Languages: Fortran or C++} {Category: Math, physics, and physiology}
7. Game theory and its applications
{Languages: Fortran, C++, or Java} {Category: Math and other analyses}
8. Symplectic algorithm toward physics simulation
{Languages: Fortran / C++} {Category: Physics and computation}