```
#include <particle_simulator.hpp>

// Define particles and interactions [omitted]

int main(int argc, char *argv[]) {

// Initialize FDPS [omitted]

PS::ParticleSystem<Tfp> psys;

PS::DomainInfo dinfo;

PS::TreeForForceLong<Tforce, Tepi, Tepj>::Monopole tree;

// Set initial condition [omitted]

dinfo.decomposeDomainAll(psys);
 psys.exchangeParticle(dinfo);
 tree.calcForceAllAndWriteBack(interact_func_ep_ep, interact_func_ep_sp, psys, dinfo);

interact_func_ep_sp, dinfo);

psys.exchangeParticle(dinfo);
```