Subject: alternative to array of linked list

Posted by forlano on Sun, 01 May 2016 22:52:21 GMT

Hello,

I am doing experiments with molecular dynamics.
The domain of simulation is divided in cells and each cell contains a number of particles.
The particle can move from a cell to another.
Usually it is used an array of linked list. I would like to replicate this structure with U++ containers.
I do not know what to use:
Vector< Vector<int> >
Vector< Index<int> >
Map< ... >
something else?
Here the speed is very important: search quickly a particle in a given cell, delete it, move in another cell.
Does anybody have suggestions? If somebody have already done similar experiment snippet code are greatly appreciated.

Thanks,
Luigi