

Workshop: Modeling of chemically powered nanomotors

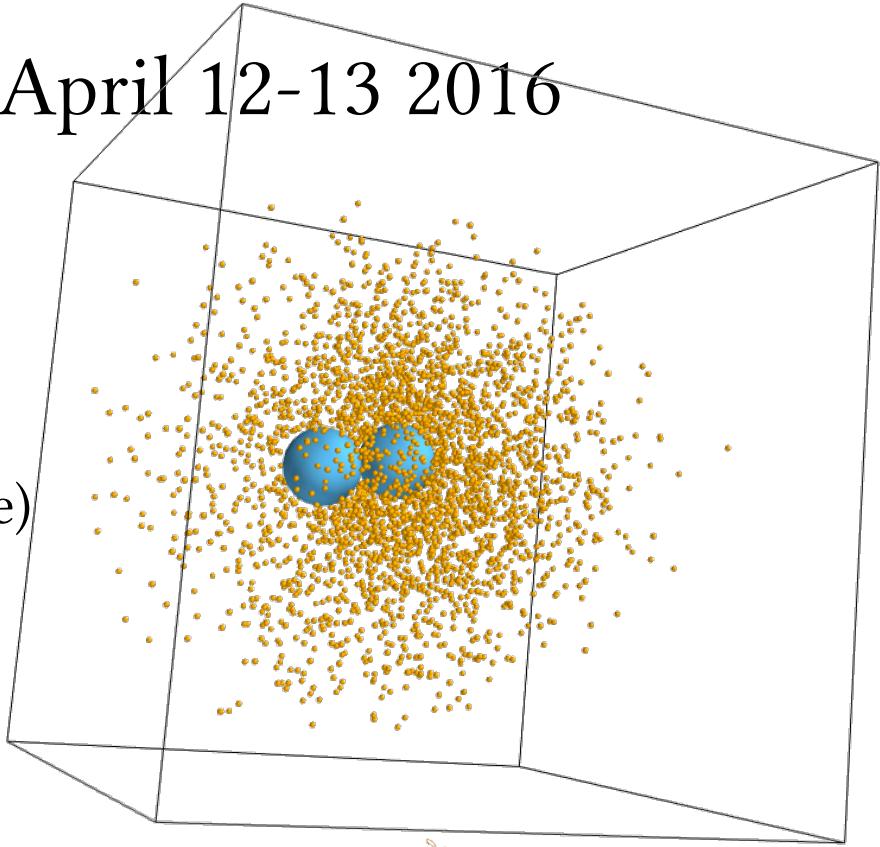
Leuven - April 12-13 2016

Speakers

Steve Ebbens (Sheffield)
Ray Kapral (Toronto)
Marisol Ripoll (Jülich)
Ayusman Sen (Penn State)

Hands-on simulation

Pierre de Buyl (Leuven)
Mu-Jie Huang (Toronto)



```
write(*,*) 'Running for', N_loop, 'loops'
call mainistic()
do i = 1, N_loop
  if (modulo(i,5) == 0) write(*,'(10s)',a)
  md_loop: do j = 1, N_MD_steps
    call md_pos(solvent, dt)

    ! Extra copy for rattle
    colloid%pos_rattle = colloid%pos
    do k=1, colloid%Nmax
      colloid%pos(:,k) = colloid%pos
      dt*2 * colloid%force(:,k)
    end do

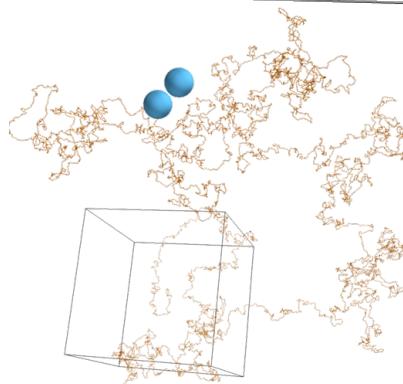
    call rattle_dimer_pos(colloids, d, dt)

    so_max = solvent%maximum_displacement
    co_max = colloids%maximum_displacement
  end do

  call rattle_dimer_pos(colloids, d, dt)

  so_max = solvent%maximum_displacement
  co_max = colloids%maximum_displacement
end do

$ ./single_dimer_pbc dimer.paramete
$ ./h5md_view_dimer.py dimer.h5
in, solvent_cells)
```



<http://lab.pdebuyl.be/2016-nanomotor/>

Scientific Committee: H. Chaté (CEA-Saclay), P. de Buyl (Leuven), R. Kapral (Toronto), B. Mognetti (Bruxelles), C. Maes (Leuven), A. Mikhailov (Berlin)
Organization Committee: P. de Buyl (Leuven), R. Lambiotte (Namur), B. Mognetti (Bruxelles), C. Maes (Leuven), C. Van den Broeck (Hasselt)