

Announcement of box calculation for Transport2016

After many discussions during and after the transport simulation workshop at Shanghai in 2014, we realized that it is very important to do simulations in periodic box since some of the comparison results can be checked and understood better in an analytical form. We would like to use the box calculations to exactly check the critical ingredients of heavy-ion collisions such as:

- Collision integral
- Pauli blocking
- Mean field dynamics

Therefore, we plan to do code comparisons with the box calculation in the Transport2016 which will be held in Beijing Normal University after NuSYM16 in the middle of June.

Since many transport codes may not have the box option, we are writing this email to suggest that anyone who will be interested in participating in the box calculation should install the box option at his/her earliest convenience. A periodic boundary condition for the box calculation can be easily implemented by redefining $\vec{r}_i \rightarrow \vec{r}_i \pm \mathbf{L}$ if the coordinate of a nucleon \vec{r}_i is out of the box boundary and by a suitable redefinition of the distance among nucleons or test particles. We plan to distribute details of the first homework and timelines on November 1, 2015.

We would also like to update everyone that the book version of the Shanghai meeting is being worked on and you have already seen the figures for the code comparison of the heavy-ion part in Chapter 4. The book should be finished before Transport2016.

Sincerely

Yingxun Zhang, Fengshou Zhang
On behalf of the Box calculation organizing committee

Akira Ono (Japan), Jun Xu (Shanghai, China), Maria Colonna (Catania, Italy), Yongjia Wang (Huzhou, China), Yingxun Zhang (Beijing, China)

(list alphabetically by first name)

Local organizers:

Chair: Fengshou Zhang (BNU, China),

Jun Xu (SINAP, China), Lie-Wen Chen (SJTU, China), Qingfeng Li (HZU, China), Yongjia Wang (HZU, China), Yingxun Zhang (CIAE, China), Zhigang Xiao (TSHU, China), Fengshou Zhang (BNU, China)

(list alphabetically by first name)