

ICEHAP Seminar

Apr. 20, Monday, 15:30, 2015

place: Fac. of Sci. Bldg 2, 3F, room No.308

**Dr. Tomoaki Ishiyama,
(IMIT, Chiba University)**

"Supercomputer Simulations of Structure Formation in the Universe"

Abstract

I report the results of cosmological simulations of small and large scale structure formation in the Universe. First, I focus on the formation and evolution of dark matter halos near the free streaming scale, and their impact on the indirect dark matter detection experiments. Then, I show our ongoing semi-analytic galaxy formation project, utilizing a ultra large cosmological simulation (8192^3 particles) with 11 times larger volume and 4 times better mass resolution than those of the Millennium Run.