

# 2013 Graduate General Education (筑波大学大学院共通科目) “Computational Science Literacy”(計算科学リテラシー)

Mar. 18-19, 2014, Center for Computational Sciences, Univ. of Tsukuba

Computational Science is a forefront approach in science and technology solving complex problems with supercomputers. It is recognized as an indispensable approach equal to experiments and theory in many research fields. It is highly recommended for those who will be working in research of any fields to learn basic knowledge and methodology of computational sciences. In this lecture, professors belonging to Center for Computational Sciences will overview researches with computational method in various fields of science. The lecture aims to provide a literacy of computational method and a comprehensive view across scientific fields through computational approaches.

(01ZZ605 • one credit Register through TWINS by 17, Mar. 2013.)

**Place : Center for Computational Sciences, International Workshop Room**

**Mar. 18 (Tuesday)**

10 : 30-12 : 00 Large scale computation in nuclear physics

K. Yabana Division of Physics, Faculty of Pure and Applied Sciences

13 : 00-14 : 30 Computational methods in the laser-material interactions

X.M. Tong Division of Materials Science, Faculty of Pure and Applied Sciences

14 : 45-16 : 15 Scalable data processing in the cloud

T. Amagasa Division of Computational Sciences, Faculty of Engineering, Information and Systems

16 : 30-18 : 00 Universal tree of life inferred from DNA and protein sequence data

T. Hashimoto Division of Biological Sciences, Faculty of Life and Environmental Sciences

**Mar. 19 (Wednesday)**

10 : 30-12 : 00 Computational Science in the Meteorology and Climatology Fields

H. Kusaka Division of Geoenvironmental Sciences, Faculty of Life and Environmental Sciences

13 : 00-14 : 30 Numerical simulations in astrophysics

K. Yoshikawa Division of Physics, Faculty of Pure and Applied Sciences

14 : 45-16 : 15 Methods and applications for biomolecular simulations

M. Shoji Division of Physics, Faculty of Pure and Applied Sciences

16 : 30-18 : 00 Study of hadron physics with Lattice QCD

N. Ishizuka Division of Physics, Faculty of Pure and Applied Sciences