2016 Graduate General Education (筑波大学大学院共通科目) Computational Science Literacy

Mar.1 and Mar.8, 2017

Sogo B1126 (Mar. 1) and Room C (Mar 8.), 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, 1Unit TWINS registration available from Feb. 27(Mon)

March 1 (Wed): Sogo B1126

8:40-9:55 Universal tree of life inferred from DNA and protein sequence data

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

10:10-11:25 Scalable data processing in the cloud

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

12:15-13:30 Study of particle physics with the lattice field theory

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

13:45-15:00 Numerical simulation in atomic, molecular and optical physics

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

15:15-16:30 Numerical Weather Prediction (join Japanese class at Room D)

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

March 8(Wed): Room C, Center for Computational Sciences

8:40-9:55 Numerical Weather Prediction

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

10:10-11:25 Numerical Astrophysics

K. Yoshikawa Faculty of Pure and Applied Sciences

13:45-15:00 Numerical calculation on high performance parallel computer

D. Takahashi Division of Information Engineering, Faculty of Engineering, Information and Systems

15: **15-16: 30** Making a Report

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

Further Details: GGEC office (内線 5837) E-mail: ggec@un.tsukuba.ac.jp