様々な分野で登場する数学が如何に使われているかを取り上げ、 具体的な現象を交えて、その最先端を国際的に活躍している研 究者を講師陣として迎え、オムニバス方式で講義します。

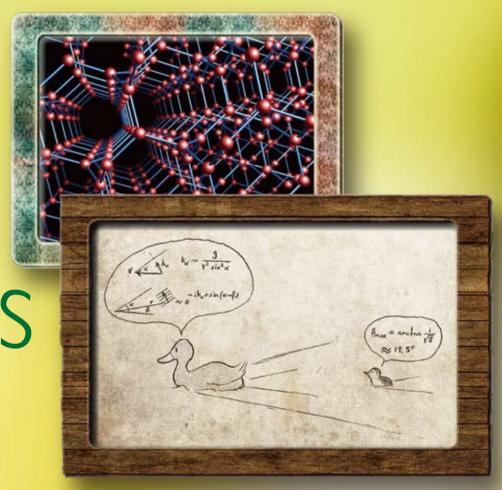
2011年

7月19日(火)—22日(金)

明治大学生田キャンパス 第二校舎A館4 階 A401教室

During the last 30 years, the establishment of communication channels between methods and applications has been the driving force of a big part of the scientific and technological progress which we observe in our daylife. The aim of this lectures is to reinforce awareness about the increasing role of Mathematical Methods and Tools for the design of complex products or protocols in various areas such as Material Science, Finance, Biology, Medicine, etc.. The increased attention of Industry to the preservation of the environment and to biomedical problems, related to the working conditions or to the health of the customer, forms also a strong link between Industry and Biomedicine. In this framework, Mathematics, which is often able to face problems coming from different environments with similar tools, could be used as a common language.

Mathematics Everywhere



7/19 (TUE)

10:30 -12:00 MASAYASU MIMURA `A BILLIARD PROBLEM OF A SELF DRIVEN BALL (1)`

13:00 -14:30 MASAYASU MIMURA `A BILLIARD PROBLEM OF A SELF DRIVEN BALL (2)

14:40 -16:10 TADASHI TOKIEDA INVITATION TO SIMPLE MODELING OF COMPLEX PHENOMENA (1)

16:20 -17:50 MASAYASU MIMURA PROBLEM SESSION

7/20 (WED)

10:30 -12:00 RYOSUKE NAGAOKA `ANOTHER LOOK AT ANCIENT MATHEMATICS FROM MODERN POINT OF VIEW

- AN INTRODUCTION OF HISTORICO-PHILOSOPHICAL APPROACH TOWARD MATHEMATICS

13:00 -14:30 TOSHIKAZU SUNADA TOPOLOGICAL CRYSTALLOGRAPHY

14:40 -16:10 TADASHI TOKIEDA INVITATION TO SIMPLE MODELING OF COMPLEX PHENOMENA (2)

16:20 -17:50 TOSHIKAZU SUNADA `PROBLEM SESSION

7/21 (THU)

10:30 -12:00 YOSHIAKI MAEDA TOWARDS NONCOMMUTATIVE DIFFERENTIAL GEOMETRY (1)
13:00 -14:30 YOSHIAKI MAEDA TOWARDS NONCOMMUTATIVE DIFFERENTIAL GEOMETRY (2)

14:40 -16:10 TADASHI TOKIEDA INVITATION TO SIMPLE MODELING OF COMPLEX PHENOMENA (3)

7/22 (FRI)

10:30 -12:00 TAKAHIKO YOSHIDA GEOMETRIC METHODS IN QUANTIZATION

13:00 -14:30 KENJI FUKAYA CAN WE GO BEYOND MANIFOLD?

14:40 -16:10 TADASHI TOKIEDA INVITATION TO SIMPLE MODELING OF COMPLEX PHENOMENA (4)

6:20 -17:50 TADASHI TOKIEDA PROBLEM SESSION



KENJI FUKAYA KYOTO UNIVERSITY



YOSHIAKI MAEDA KEIO UNIVERSITY



MASAYASU MIMURA MEIJI UNIVERSITY



RYOSUKE NAGAOKA TO MEIJI UNIVERSITY MI



TOSHIKAZU SUNADA MEIJI UNIVERSITY



ADA TADASHI TOKIEDA UNIVERSITY OF CAMBRIDGE



TAKAHIKO YOSHIDA MEIJI UNIVERSITY

本科目は博士後期課程学生対象ですが、博士前期課程学生の参加も歓迎いたします。正規の履修生のほか、 聴講のみの参加(他大学学生も可)も受け付けます。遠方から聴講を希望する学生には旅費等の援助を行 いますので、希望する場合は7月1日(金)までに gcoe@mics.meiji.ac.jp 宛にご連絡ください。 ※ 旅費等の援助は本学予算によって運営しているものであり、全ての方への援助をお約束するものではあ りませ んので、予め、ご了承ください。

後援: 明治大学グローバル COE プログラム「現象数理学の形成と発展」 明治大学先端数理科学インスティテュート

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