21COE講演会

講師: Prof. H. Yang

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演題: High-resolution single-molecule spectroscopy and 3D single-particle tracking

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場所:京都大学理学研究科6号館北棟 5階会議室(571)

要旨: The recent advances in time-dependent studies of single molecules or particles is discussed. Using ideas from information theory and statistical sampling, it is now possible to quantitatively measure the conformational distribution, the potential of mean force, and the velocity-distance distribution (phase-space density) from a single molecule. These new methods are used to study protein folding, as well as the dynamics in conformational fluctuation and enzymatic reaction. We also discuss our latest experimental and theoretical progresses in doing optical single-molecule measurements on a single-particle that freely moves in 3D, and sum-frequency generation chiral imaging microscopy.

生体分子の1分子観測で新進気鋭の活発な研究者です。多くのご来聴をお願い申し上げます。

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