第161回

HMMCセミナー

HMMCセミナー　レクチャーシリーズ

Date： 2025年8月1日（金）
13：30〜15：00 ／ 15：30〜17：00

Speaker： **Chih-Chiang Huang**（National Chung Cheng University）

Place： 北海道大学 電子科学研究所
中央キャンパス総合研究棟2号館5階 講義室

Title： Calculus of Variations and Reaction−Diffusion Equations

Abstract：

In the first talk（13:30−15:00）, I am going to introduce some histories of calculus of variations and how to find the global minimizer of an energy functional. In addition, some semilinear elliptic equations with the Dirichlet or Neumann boundary condition will be studied from the viewpoint of variational method. Moreover, I will apply a variational method to construct traveling wave solutions of a scalar equation with bistable nonlinearity.

In the second talk（15:30−17:00）, I will focus on the existence of cylindrical traveling waves for the gradient system and the FitzHugh−Nagumo system, which enjoy variational structures. Finally, a scalar equation with a nonlocal effect will be also studied in this tlak.

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