

Collaborative Learning in Introductory Science Laboratory Courses in English

本講演では、ノースカロライナ大学チャペルヒル校より物理教育の第一人者であるDuane L. Deardorff博士をお迎えし、実験授業の効果的な指導法について幅広く議論いたします。

Deardorff博士は同大学物理・天文学科でTeaching Professorを務められ、長年にわたり学生の能動的な学習を促進する実験教育の研究と実践に取り組んでこられました。博士が蓄積された豊富な知見は、学生の理解を深め、科学的思考力を養う実験授業の設計・運営に関する貴重な示唆を含んでおります。参加者の皆様が明日からの教育実践にすぐに活用できる具体的な指導技法をお伝えいただく予定です。自然科学分野はもとより、人文・社会科学分野においても応用可能な教育手法について学べるまたとない機会となります。

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Professor Deardorff currently employs interactive-engagement methods of instruction that have been demonstrated to be effective through Physics Education Research (PER) at the University of North Carolina at Chapel Hill. His instruction typically incorporates classroom demonstrations, online homework assignments using MasteringPhysics or Expert TA, in-class questions with a classroom response system, and original real-world problems designed to foster critical thinking. To advance these educational reforms, he develops instructional resources for laboratories, implements them in practice, and continually evaluates and refines laboratory instruction.

He will visit TU this October as part of the Fulbright Specialist Program, “Educational Reform and Innovation in the Natural Sciences towards Intercultural Collaborative Learning in Japan.” In this seminar, he will present his current initiatives in STEM education.

Timetable

16:00-16:05 Opening Remarks

Tomonori Nochi (Institute for Excellence in Higher Education, Graduate School of Agricultural Science, Tohoku University)

16:05-16:10 Speaker Introduction

Itaru Nakamura (Institute for Excellence in Higher Education, Tohoku University)

16:10-18:10 Lecture (Including Q&A Session)

Dr. Duane L. Deardorff (UNC Chapel Hill)

18:10 Closing Remarks

Itaru Nakamura (Institute for Excellence in Higher Education, Tohoku University)

Speaker



Duane Deardorff

Teaching Professor and Physics Lab Director
at The University of North Carolina

Duane Deardorff is a Teaching Professor at UNC Chapel Hill's Physics and Astronomy Department, coordinating labs for 3,000+ students annually and supervising 60 teaching assistants. He holds a Ph.D. in Physics from NC State and a B.A. from Manchester College.

His research focuses on measurement uncertainty and classroom innovations. A pioneer in interactive physics education, he contributed to the SCALE-UP program development. Notable achievements include the Galilean Cannon World Record (2020), UNC Student Teaching Award (2009), and AAPT national award (2003). He has dedicated over 20 years to advancing physics education research and innovative teaching methods.

In-Person Seminar

Wed. **October 8, 2025** 16:00-18:10
東北大学川内北キャンパス_川北合同研究棟_101ラウンジ

〒980-8576 仙台市青葉区川内41  https://www.tohoku.ac.jp/map/ja/?f=KW_A07



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■ 申込み方法

QRコード、教学共創推進センターHP <https://www.cpd.ihe.tohoku.ac.jp/>

■ 申込み締切り：2025年10月5日(日) ■ 定員：20名 ■ 参加費：無料

■ 問い合わせ先

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