科目ナンハ	(リング										
授業科目名 <英訳>	ILAS Seminar-E2 :Topics in Frontier Physics (現代物理学の最先端) ILAS Seminar-E2 :Topics in Frontier Physics						担当者所属 職名·氏名		斗 准教授	WENDELL,Roger	
群	少人数群	単位数		2単位		週]コマ数 1		マ	授業形態	ゼミナール (対面授業科目)
開講年度· 開講期	2024・前期	受講定員 (1回生定員)		20 (12) 人		配	当学年	主と	:して1回生	対象学生	全学向
曜時限	月5		教室		4共25					使用言語	英語
キーワード	Modern Physics / Nobel Prize / Physics Discoveries										

[授業の概要・目的]

This class will introduce students to new and exciting topics in modern physics. Recent discoveries and Nobel prize-winning research will be discussed in straight-forward terms so every one can understand and enjoy modern science. Lectures and discussions will be held in English and will cover a wide variety of topics in recent research. Even students with no previous physics experience are encouraged to join this class and learn about how we understand the world today.

[到達目標]

Students in this course will learn about the fundamental physics behind recent topics in modern research as well as how they are applied in the real world. In addition, students will be introduced to and practice speaking in scientific English.

[授業計画と内容]

Each week a different topic in modern physics and cosmosolgy will be presented. The following week will provide a review of material with discussion. Topics will include some of the following:

- -) Discovery of the Higgs boson
- -) Observation of gravitational waves
- -) Neutrinos and their oscillations
- -) Radiation in the modern world
- -) The history and accelerating expansion of the universe
- -) Quarks and CP symmetry
- -) Lasers for trapping atoms
- -) From the birth of stars to supernovae

In addition to the above, students may request lectures on a few topics of their choice.

[履修要件]

特になし

[成績評価の方法・観点]

This is a seminar course and the grade will be based on in-class participation only. Coming to each class with questions and an open mind is all that is needed.

	ics (現代物理学の最先端) (2)
<u></u> 数科書]	
<u></u> 用しない	
参考書等]	
(参考書)	
業中に紹介する	
受業外学修(予習・	
	l to review ahead of lectures and supplementary reading will be presented in class.
その他(オフィスア	
idents curious about	recent discoveries in physics are encouraged to attend this course.