COURSE DETAIL

GENERAL RELATIVITY
Country Hong Kong
Host Institution University of Hong Kong
Program(s) University of Hong Kong
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Physics
UCEAP Course Number 155
UCEAP Course Suffix
UCEAP Official Title GENERAL RELATIVITY
UCEAP Transcript Title GENERAL RELATIVITY
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description

This course examines general relativity. Topics include: The principle of equivalence; inertial observers in a curved space-time; vectors and tensors; parallel transport and covariant differentiation; the Riemann tensor; the stress-energy tensor; the Einstein gravitational field equations; the Schwarzschild solution; black holes; gravitational waves detected by LIGO, and Freidmann equation.

Language(s) of Instruction
English

Host Institution Course Number
PHYS4654

Host Institution Course Title
GENERAL RELATIVITY

Host Institution Course Details
https://webapp.science.hku.hk/sr4/servlet/enquiry?Type=Course&course_code=PHYS4...

Host Institution Campus

Host Institution Faculty

Host Institution Degree

Host Institution Department

Course Last Reviewed
2024-2025

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