



# School of Physics

Pre stage 2, 3 advisory sessions, February 2025

Talk given by: Dr Tom McCormack

The School of Physics offer 3 degrees



# 1. Physics

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## 2. Physics with Astronomy and Space Science



Prof. Sheila  
McBreen, UCD

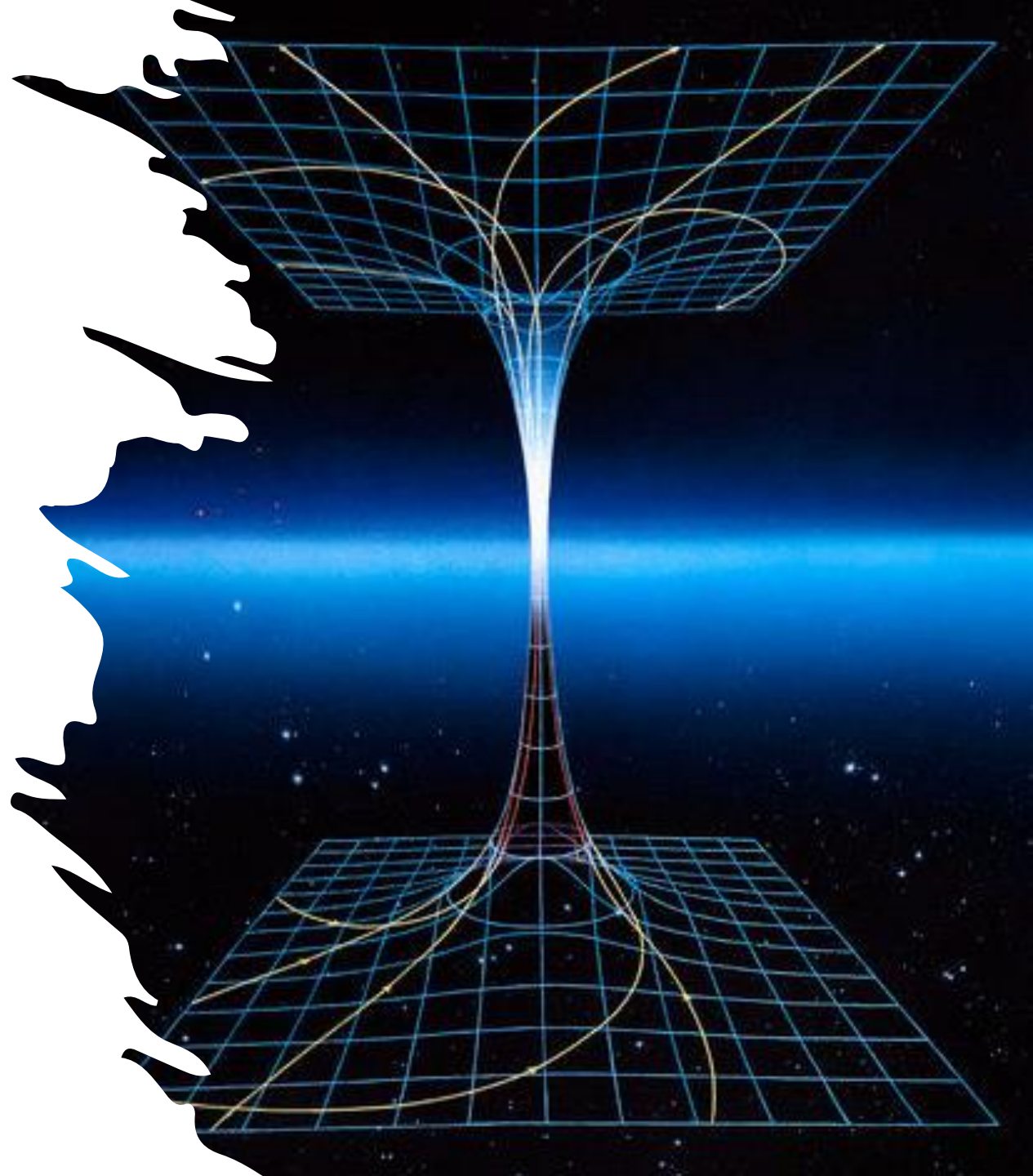


Ireland's first  
satellite was  
developed in  
UCD

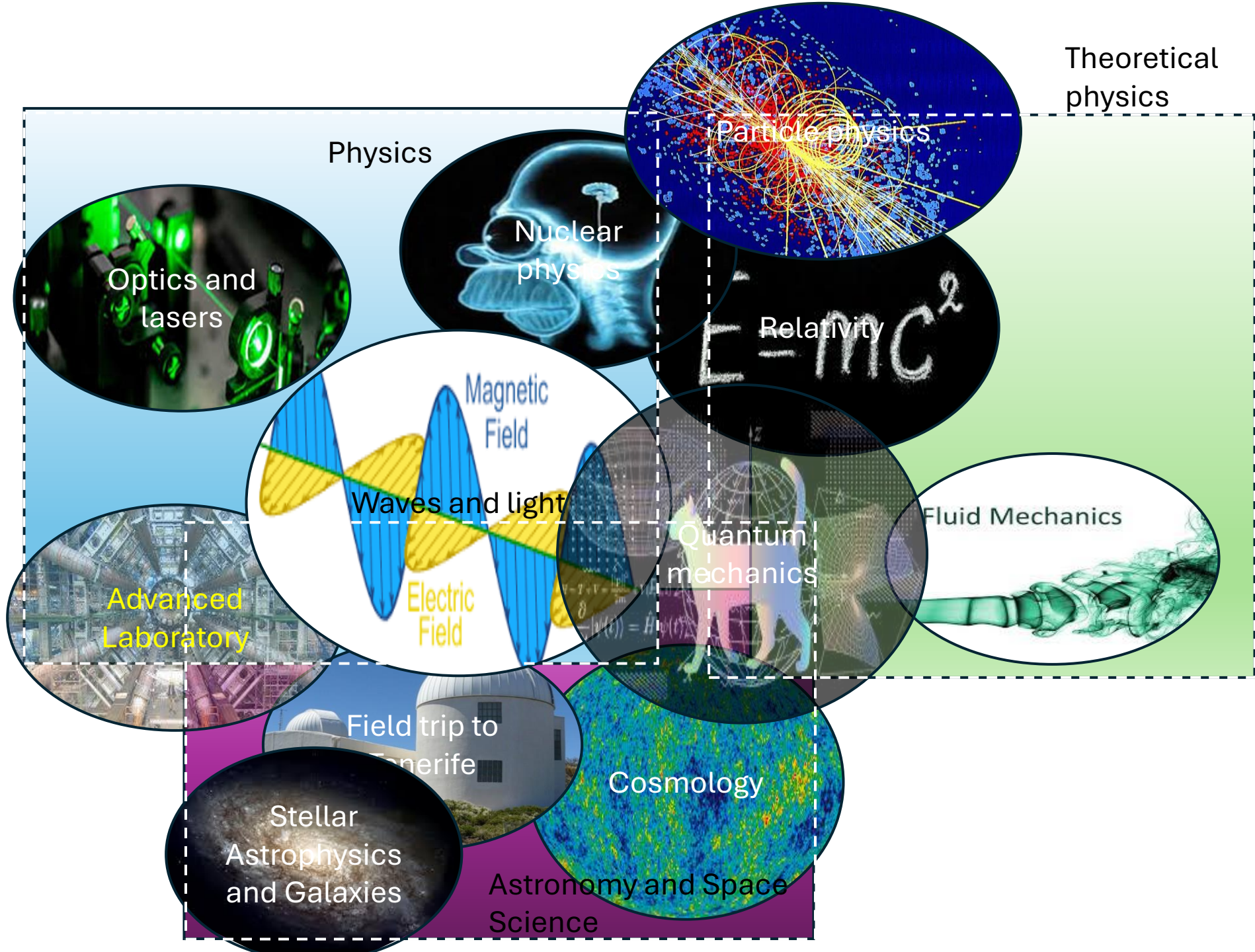


Prof. Lorraine Hanlon,  
UCD

# 3. Theoretical Physics



# What you will study



# Careers



# ASML



## Core modules required for Stage 2 | Mathematics & Physics Degrees

- Core (taken in Stage 2)
- Programme Core (taken in Stage 1 or 2)
- Programme Core (taken in Stage 2 or 3)
- Programme Core for all Stage 2 Physics if PHYC10250 completed in Stage 1

# Core modules for Stage 2

Module Code	Title	Trimester	Physics	Theoretical Physics	Astron. & Space Sci
ACM20030	Computational Science	Aut	●	●	●
MATH20060	Calculus of Several Variables	Aut	●	●	●
ACM20150	Vector Calculus	Spr	●	●	●
ACM20050	Classical Mechanics	Aut		●	
ACM20060	Oscillations and Waves	Spr		●	
PHYC20020	Introductory Quantum Mechanics	Aut	●	●	●
PHYC20060	Methods for Physicists	Spr	●	●	●
PHYC20090	Electronics and Devices	Spr	●	●	●
PHYC20080	Fields, Waves and Light	Spr	●	●	●
ACM10060	Appl of Differential Equations	Spr	●		●
PHYC20100	Thermo & Stat Physics	Aut	●	●	●
PHYC10250	Thermal Physics and Materials	Aut	●	●	●
PHYC20040	Exploring the Solar System	Spr			●
PHYC10050	Astronomy & Space Science	Aut			●



# Stage 3 core modules

Stage 3 - Core Modules				Theoretical Physics	PASS	Physics
Module Code	Module Name	Credits	Term			
ACM30200	Mathematical Fluid Dynamics I	5	Spring			
ACM30220	Partial Differential Equations	5	Autumn			
MATH30040	Complex Analysis	5	Spring			
PHYC30020	Classical Mechanics+Relativity	5	Autumn			
PHYC30030	Quantum Mechanics	5	Autumn			
PHYC30070	Electromagnetism	5	Spring			
PHYC30080	Optics & Lasers	5	Spring			
PHYC30100	Stellar Astrophysics	5	Autumn			
PHYC30170	Physics Astro and Space Lab 1	20	2 Trimester			
PHYC30320	Advanced Laboratory I (TP)	10	2 Trimester			
PHYC30300	Advanced Laboratory I	20	2 Trimester			
<b>Stage 3 - Programme Cores</b>						
PHYC20100	Thermo & Stat Physics	5	Autumn			
PHYC30050	Condensed Matter Physics	5	Autumn			
PHYC30090	Nuclear Physics	5	Spring			
ACM20030	Computational Science	5	Autumn			

Students must take PHYC20100 if not taken in stage 2. If PHYC20100 had been taken in Stage 2, students must take PHYC30050 in Stage 3.

Can be taken in Stage 3 or Stage 4. Students who wish to take PHYC40110 Medical Physics in Stage 4 must take PHYC30090 in Stage 3.

If not taken in Stage 2 students MUST TAKE ACM20030. If ACM20030 had been taken in Stage 2, students MUST TAKE PHYC30080 in Stage 3. PHYC30080 can be taken in Stage 3 or Stage 4.