## Multi-Messenger & High Energy group

Dires 4

## What are we studying?

What is going on at the surface of black holes and neutron stars

How plasma jets are accelerated in the universe up to ultrarelativistic speeds

The physics of plasma shocks at high speed within high magnetic fields

How magnetized neutron stars are emitting their energy

How explosive transient events distort the gravitational field

What is the distribution of binaries within the Universe

How strongly are gravitational waves and electromagnetic radiation correlated

How to identify and characterise space satellites and debris with optical observations

And all technical aspects needed for those studies



Example of some offers

A general review of the current knowledge of gamma-ray bursts, and a focus on why some features are no more observed

Supervisor: B. Gendre

A study of the spectro-temporal properties of the fast radio bursts observed so far

Supervisor: E. Howell & T. Slaven-Blair

The observations of artificial satellites with a Polarimeter to study the aging of the materials

Supervisor: D. Coward & J. Kennewell



The modification of the robotic control system of the Zadko Observatory

Supervisor: J. Moore & B. Gendre

## Who are we?



Eloise Moore HE Cosmic Rays



Teresa Slaven-Blair GW Multi-Messengers



Hayden Crisp Transient data mining



Bruce Gendre High Energy Transients



Eric Howell

GW Multi-Messengers



John Kennewell Artificial Satellites



David Coward Transient & SSA



John Moore Telescope & Building



You can be the next one!