



Cardiff Astrophysical Summer School 2025

Monday 21st - Friday 25th July



Programme

	9:00 - 12noon	12 noon - 13:30	13:30 - 14:00	14:00-17:00	Evening
Mon	Welcome + Logistics Intro to the ISM: the equations of radiative transfer, phases and chemical makeup of the ISM, and heating-cooling processes.	Lunch	Science highlight talks from Cardiff Staff	Workshop: using a Radiative Transfer Code to make synthetic images of the ISM	
Tues	Python programming for astrophysicists	Lunch		Workshop: image manipulation and data analysis	
Wed	Instrumentation for astronomy: a guide to sub-mm detectors + tour of the instrumentation labs	Lunch		Castle trips / sightseeing	Student-staff dinner
Thur	Star formation in molecular clouds	Lunch		Workshop: extracting properties of molecular clouds from dust continuum and line emission	
Fri	The ISM in nearby galaxies	Lunch		Workshop: extracting galaxy-scale properties from extra-galactic observations	