

Cloudy [Workshop](#) Participants
2014 August Queen's University Belfast

Gary Ferland, Queen's University Belfast, U of Kentucky

Chemical evolution of the cosmos, AGN and feedback, numerical plasma simulations, atomic & molecular physics



Richard Tunnard, University College London

AGN outflows and feedback: molecular tracers of AGN and shock chemistry, in particular SiO and HCN. The rôle of mid-IR pumping and the HNC/HCN ratio.



Kingsley Gale-Sides, Keele University

Climate and weather of the ISM: small and large scale structures; their spatial and compositional evolution and dynamics.



Matt Nicholl, Queen's University Belfast

Super-luminous supernovae: analysis of spectra and light curves; models based on central (magnetorotational) engines, and interaction with dense CSM



Anne Fox, University of Potsdam, Germany

I'm interested in observations of intergalactic gas (high resolution at high redshift). I do absorption line spectroscopy of metal line systems in quasar spectra. I analyse the chemical composition of intervening gas clouds and therefore I have to perform ionisation corrections. I am also interested in the correlation between absorbers and galaxies and in the ionisation conditions in the vicinity of quasars (proximity effect).



Mattia Bulla, Queen's University Belfast

Type Ia Supernovae: radiative transfer calculation, in particular theoretical modelling of polarisation spectra



Ting-Wen Lan, Johns Hopkins University

The circumgalactic medium (CGM) traced by metal absorption lines; the connection between CGM galaxies; diffuse interstellar bands; large surveys and data mining



Janet Chen, Queen's University Belfast

My main interest is the host galaxy environment of a new type of violent explosion labelled super-luminous supernovae. These hosts tend to be faint galaxies which are likely to have low mass and low metallicity.



Catherine McEvoy, Queen's University Belfast

The structure of the interstellar medium on a fine scale, from 1 au to 1 pc, by comparison of interstellar absorption lines in search of variation over time.



Helen Meskhidze, Elon University

Starburst galaxies: I'm interested in understanding the dynamics of starforming regions by analyzing the most influential parameters in emission line formation. We study this through running simulations of starforming regions and determining the resultant emission lines of the surrounding gas clouds.



Tek Prasad Adhikari, Nicolaus Copernicus Astronomical Center, PAN, Warsaw, Poland

Study of warm absorbers in AGNs. I am also interested to study the effect of warm absorption in relativistically broadened Fe line around 6.4 keV in the AGN spectrum.

Cloudy use : modelling of the warm absorbers in AGNs, conditions for the thermal instability in the Galactic Centre.



Andri Prozesky, University of South Africa

Photoionized nebulae: modeling of radio recombination lines, stimulated processes, elemental abundance calculations, radiative transfer.



Brianna Smart, University of Wisconsin

Research Interests:

Study of the WIM in the Magellanic Clouds System. Mapping the Magellanic Stream in H-alpha.

Cloudy use:

Modelling the WIM in the Magellanic Clouds to try and understand the heating mechanism involved.



Megan Whewell, Mullard Space Science Laboratory, University College London, UK

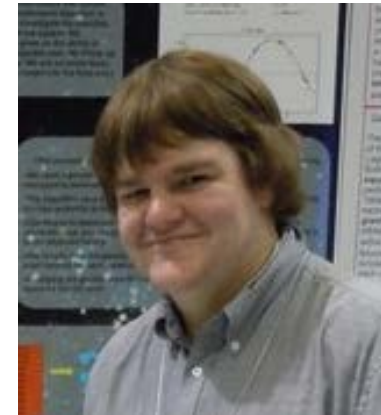
I am studying narrow emission lines in the soft X-ray spectrum of the AGN NGC 5548. Recent observations show very low soft X-ray continuum flux so my research has focussed on diagnostics using the He-like triplets of Oxygen, Nitrogen and Neon and the radiative recombination continuum (RRC) features so far. These indicate production from photoionised plasma and I wish to use Cloudy to better understand the physical parameters of the emitting region.



Thomas Finzell, Michigan State University

Research Interest: Multiwavelength study of classical novae, with specific emphasis on shock acceleration and gamma-ray production.

CLOUDY Use: Abundance analysis of nova ejecta; following the ionization and thermal evolution of nova ejecta in time. Use this analysis to place constraints on nova models.



Jake Turner, University of Virginia

Research Interests:

Solar System planets/moons and Exoplanets: Atmospheres and magnetic fields

Cloudy use:

Modeling the physical environment around a transiting hot Jupiter



Sibasish Iaha, Queen's University Belfast

I am working on warm absorbers and other ionised absorbers in the optical, UV and X-ray spectra of active galactic nuclei.



Larissa Takeda, University of Sao Paulo

I am interested in nova eruptions. I intend to use CLOUDY to understand how the mass distribution in nova envelopes affects the heavy metal abundances estimative.



Joe Polshaw, Queen's University Belfast

I am an observer and my main interests are supernovae (SNe) which interact with circumstellar material ejected from their progenitor stars prior to explosion, known as SNe type II_n. I am also interested the environments of SNe, in particular SNe type Ia, an increasing number of which have been discovered in extremely faint host galaxies that are thought to have very low metallicities.



Venu Kalari, Armagh Observatory, Queen's University Belfast

Research interests: Numerical simulations of circumstellar discs, and stellar SED simulations.



Nicole Reindl, Institute for Astronomy and Astrophysics, University of Tübingen

I am a member of the stellar atmosphere group and I am doing spectral analysis of hot compact objects like O(He) stars, Central Stars of Planetary Nebulae and White Dwarfs.



Belay Sittaw, Dire Dawa University

I work on the the impacts of heavy metals on models of photo-ionization in H II regions.



Patricia Bessiere, The University of Sheffield.

I'm just starting a new project aimed at tracing AGN driven feedback through neutral outflows.



Tommy Nelson, University of Minnesota

Research interests: Accretion in white dwarf binaries; the physics of mass loss during nov outbursts; panchromatic observations of classical and recurrent novae



Catia Silva, Anton Pannekoek Institute for Astronomy, Amsterdam & Netherlands Institute for Space Research (SRON).

I'm working on AGN feedback, in particular studying warm absorbers in Seyfert galaxies, combining timing and spectral analysis.

