Contents

Conference Overview **General Information** 3 Oral Programme 4 Poster Programme Oral Programme Abstracts Monday 18 July 13 Tuesday 19 July 39 63 Wednesday 20 July Thursday 21 July 79 Friday 22 July 103 Poster Programme Abstracts 116 **Participant Directory** 188 Notes 193

Conference Overview

Galaxy Formation

An International Conference, Durham, United Kingdom 18-22 July 2011

http://astro.dur.ac.uk/Gal2011/

A comprehensive multiwavelength view of the universe of galaxies, AGN and larger scale structures over a large fraction of cosmic history is beginning to emerge. A complete census of star formation is within reach and this will reveal which galaxies are growing most rapidly at different epochs and how galaxies of different masses were assembled.

With the overwhelming circumstantial evidence in favour of hierarchical structure formation, theoretical models of galaxy formation are reaching maturity and are now able to confront these new data in an increasingly rigorous way. This meeting brings together theorists and observers to review progress towards understanding the physics of galaxy formation. The key questions to be addressed include:

- · How are galaxy properties linked to those of their dark halos?
- · What drives the formation of discs, of bulges?
- · How do galaxies get their gas and process it into stars?
- · What are the links between central black hole formation, galaxy formation and AGN?
- · How do internal and external factors drive galaxy evolution?
- How do galaxies and central black holes affect their environment?
- · What do the Milky Way and its neighbours tell us about galaxy formation?
- How did galaxy formation begin?

Invited Speakers

Tom Abel • David Alexander • Rychard Bouwens • Francoise Combes • Charlie Conroy • Romeel Davé David Elbaz • Sara Ellison • Carlos Frenk • Reinhard Genzel • Tim Heckman • Amina Helmi • Ryan Hickox Philip Hopkins • Guinevere Kauffmann • Rob Kennicutt • Simon Lilly • Crystal Martin • Lucio Mayer Ian McCarthy • Brian McNamara • Xavier Prochaska • Hans-Walter Rix • Joop Schaye • Chuck Steidel Linda Tacconi • David Weinberg • Simon White

General Information

Venue and Locations

Oral presentations	Sir Arnold Wolfendale (ground floor) & Rosemary Cramp (second floor) Lecture Theatres Calman Learning Centre, Durham University
Posters, coffee & Sunday evening buffet reception	Kingsley Barrett & Derman Christopherson Rooms on the top floor of Calman Learning Centre
Registration	Ground & top floors, Calman Learning Centre
Lunches	Collingwood College
Conference dinner	St Aidan's College
"Cosmic Origins" 3D movie	Dawson Building Lecture Theatre

Presentation Information

Talks – Plenary talks are 25 minutes plus discussion, while talks in parallel sessions are 15 minutes plus discussion. We are unfortunately not able to swap laptops for presentations. We request that all speakers provide us with their talk on a thumb drive as far in advance as possible, in order to address technical issues.

Posters – Posters are displayed from Sunday to Wednesday (groups 1–4) or Wednesday to Friday (groups 5–7). Posters should be swapped over at lunchtime on Wednesday. The poster boards allow up to standard-sized posters (Ao or 36 x 48 inches); because of limited space, standard-size posters must be orientated vertically.

All poster presenters are invited to give a brief (half a minute, along with one slide) description of their poster during the poster sessions on the mornings of Tuesday (groups 1–4) and Thursday (groups 5–7). Your slide (in PDF form) should be sent by email to gal2011@durham.ac.uk, with the filename in the form day_number_yoursurname.pdf (for example, thursday_5.18_hickox.pdf).

Scientific Organising Committee

Carlos Frenk, Simon White (co-chairs) ◆ Sara Ellison ◆ Lars Hernquist ◆ Tim Heckman ◆ Rob Ivison Guinevere Kauffmann ◆ Hans-Walter Rix ◆ Joop Schaye ◆ Chuck Steidel ◆ Linda Tacconi

Local Organising Committee

Ryan Hickox (chair) • David Alexander • Carlton Baugh • Cedric Lacey • Ian Smail Rich Bielby • Anaïs Gonneau • Violeta Gonzalez-Perez • John Stott