

Friday 26 April 2024

09:00 - 10:35

**STAR FORMATION IN OUR GALAXY
FROM THE ISM, VIA PRESTELLAR
CORES (CHAIR: ŁUKASZ TYCHONIEC)**

Jonathan Williams

How old HARP data helps us understand questions at the forefront of planet formation

Rowan Smith

How galactic environment alters molecular clouds and star formation

Francesco Zagaría

From dust to planets: The ALMA and VLA view of planet formation

Sipra Hota REMOTE TALK

Unraveling of the hierarchical star formation in the SMC main body using UVIT/AstroSat

Katarzyna M. Dutkowska

Decoding Galactic Chemistry: Insights from the Central Molecular Zone

10:35 - 11:05 • Coffee break

11:05 - 12:30

**STAR FORMATION IN OUR GALAXY
FROM THE ISM, VIA PRESTELLAR CORES**

Rajika Kuruwita

Were all low-mass fast rotators born in a binary?

Hannah Ambrose

The Origin of Stellar Multiplicity

Zacariyya Khan

HII Region Feedback: The Effect on Magnetic Fields in the Hub-Filament System G34.26+0.15

Yinuo Han

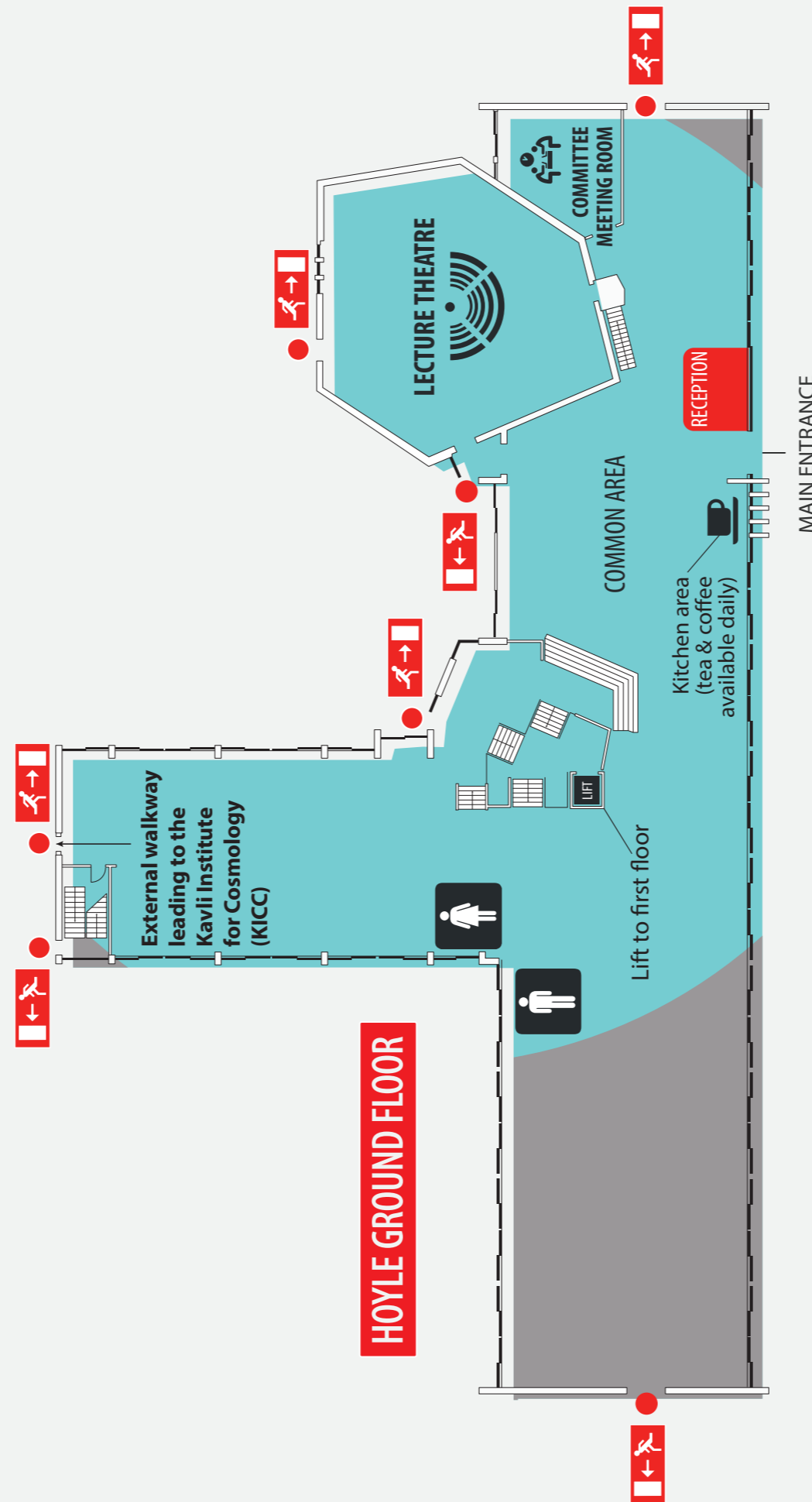
The high-resolution structure of extrasolar planetesimal belts revealed by ALMA

Charles Law REMOTE TALK

A Wideband SMA Astrochemical Survey of Massive Young Stellar Objects at Subarcsecond Resolution

Concluding remarks

12:30 - 14:00 • Lunch



22-26 APRIL 2024 **KICC**



Raising the veil on star formation near and far
A conference in honour of Richard Hills



Monday 22 April 2024

08:30 - 09:00

Registration (Hoyle Foyer, Institute of Astronomy)

09:00 - 09:15

Welcome (Hoyle Lecture Theatre)

09:15 - 10:30 • **ASTROCHEMISTRY AND STAR FORMATION TRACERS (CHAIR: MARTINA WIEDNER)**

Paola Casselli

Astrochemistry at the dawn of star and planet formation

Ana Lopez Sepulcre

Protostellar shocked regions as factories of organic molecules

Mathilde Bouvier

Sulphur-bearing species as tracers of star formation

towards the Central Molecular Zone of NGC 253

Gan Luo REMOTE TALK

Measuring the cosmic-ray ionization rate in nearby clouds

10:30 - 11:00 • Coffee break

11:00 - 12:35 • **ASTROCHEMISTRY AND STAR FORMATION TRACERS**

Łukasz Tychoniec

Astrochemical diagnostics of protostellar

sources: from ALMA to JWST

Serena Viti

Astrochemistry in nearby galaxies

Jessy Marin

Measuring the Magnetic Properties of a Galactic Bone

Joshua Butterworth

Molecular Isotopologue Measurements in

NGC253 as Possible Tracers of Stellar Evolution

Erica Behrens

Characterizing Starbursts: Mapping the Physical

Conditions of NGC 253 with Neural Networks

12:35 - 14:00 • Lunch

14:00 - 15:30 • **STAR FORMATION IN NEARBY GALAXIES (CHAIR: SUSANNE AALTO)**

Rob Kennicutt

Star Formation in Nearby Galaxies: Successes and Challenges

Elizabeth Watkins

Characterising Superbubble Populations And Their

Energetics In Nearby Galaxies Using JWST And ALMA

Francesco Belfiore

The JWST view of embedded star formation in nearby galaxies

William Baker

What drives star-formation? Scaling relations disentangled

Stephen Eales

Star Formation in the Big Neighbour

15:30 - 16:00 • Coffee break

16:00 - 17:30 • **STAR FORMATION IN NEARBY GALAXIES**

Kabelo Kesebonye

Investigating the Relationship Between Star

Formation in Galaxies and Their Cluster Environment

Using Radio Observations from the MeerKAT Telescope

Jakob den Brok

Decoding Molecular Gas Conditions in Nearby Galaxies:

Insights from Comprehensive CO Isotopologue Surveys

Andrea Romanelli REMOTE TALK

Environmental dependance of GMC evolution

and star formation in nearby galaxies

Debosmita Pathak REMOTE TALK

The Two-Component Probability Distribution

Function of mid-IR Emission from Star-Forming

Galaxies as Revealed by JWST

Laura Lenkic

A JWST MIRI and NIRCам Analysis of the

Young Stellar Population in the Spitzer I

Proto-Super Star Cluster of NGC 6822

Kamran Bogue

Differences in the Global Properties of a Simulated

Galaxy With and Without Magnetic Fields

17:30 • Wine and Cheese

Tuesday 23 April 2024

09:00 - 10:30

PRIMEVAL GALAXIES AND COSMIC EVOLUTION (CHAIR: JORIS WITSTOK)

Renske Smit

The ALMA view of galaxies in the Epoch of Reionisation

Mahsa Kohandel

Revealing post-starburst galaxies in the core of the most

distant proto-cluster at $z = 7.88$ Confirmed by NIRSpec/JWST

Matus Rybak

Tracing dense gas content of galaxies across cosmic time

Fabrizio Gentile

Dark progenitors and massive descendants: an ALMA/JWST

perspective on Radio-Selected NIRdark galaxies

Kiana Kade

A Tale of Three Galaxies: Understanding the

environment and ISM of massive galaxies

at high- z through emission line studies

10:30 - 11:00 • Coffee break

11:00 - 12:30

PRIMEVAL GALAXIES AND COSMIC EVOLUTION

Caitlin Casey

The most massive galaxies at $5 < z < 12$ from JWST and ALMA

Sian Phillips

Star Formation in the most massive cold

gas reservoirs in the Epoch of Reionization

Gian Luigi Granato

Dust evolution in cosmological galaxy formation models

John Weaver

Uncovering the dramatic rise of a cosmic beast at $z = 8.51$

Chentao Yang REMOTE TALK

The rich molecular inventory of high-redshift dusty

galaxies revealed by broadband spectral line surveys

12:30 - 14:00 • Lunch

14:00 - 15:25

STAR FORMATION IN NEARBY GALAXIES

Susanne Aalto

Hidden gems - star formation in deeply obscured galaxies

Ute Lisinfeld

Star formation and molecular gas

in the most massive spiral galaxies

Kate Pattle

Interstellar Magnetic Fields: From

Star Formation to Galaxy Evolution

Richard Tuffs

Radiative transfer modelling of the heating and cooling

of neutral and molecular gas in star-forming galaxies

Ivana Beslic REMOTE TALK

Extended HCN emission across the

disk of NGC 253 observed by ALMA

15:25 - 16:00 • Coffee break

16:00 - 17:30

STAR FORMATION IN NEARBY GALAXIES

Karin Sandstrom

A High Resolution View of Star Formation and the

Interstellar Medium in Nearby Galaxies with JWST

Clare Wethers

Is Star Formation Sufficient to Drive Outflows in

Compact Obscured Nuclei (CONs)?

Shyam Menon

The Nature of Star Formation and Radiative

Feedback in Dusty Obscured Conditions

Charlotte Christensen REMOTE TALK

Environmental differences in the star

formation histories of dwarf galaxies

Poster Session

Ilha, Liu, Hewapathirana, von Raesfeld

Wednesday 24 April 2024

09:00 - 10:30

PRIMEVAL GALAXIES AND COSMIC EVOLUTION (CHAIR: RENSKÉ SMIT)

Joris Witstok

The origin of dust grains within galaxies

seen in the first billion years of cosmic time

Maximilien Franco

An unprecedented view of galaxies

during the EoR with COSMOS-Web

Livia Vallini

Spatially resolved Kennicutt-Schmidt relation at $z \sim 7$ and

its connection with the interstellar medium properties

Sandro Tacchella

Star formation in Cosmic-Dawn galaxies

Jan Scholtz

Dusty star-forming galaxy at $z \sim 6.8$ with NIRSpec/IFS and ALMA

Poster Session

Robuschi, Toomey, McClymont, Ji

10:30 - 11:00 • Coffee break

11:00 - 12:30

PRIMEVAL GALAXIES AND COSMIC EVOLUTION

Rüdiger Kneissl

From Planck to ALMA: Proto-clusters and Lensed Galaxies

Roberta Tripodi

Investigating the SFR and SMBH-galaxy

co-evolution in QSOs at $z > 6$

Katherine Ormerod

JWST Spectroscopy of Extreme Emission-Line

Galaxies in the Epoch of Reionization

Anna Feltre REMOTE TALK

Resolving HII regions at pc resolution

within their galactic context in M33

Alexandra Pope REMOTE TALK

Decoding the cosmic evolution of galaxies

imprinted on their interstellar medium

12:30 - 14:00 • Lunch

14:00 - 15:30

RICHARD HILL'S SESSION (CHAIR: ROBERTO MAIOLINO)

Malcolm Longair

Remembering Richard Hills

Martina Wiedner

Remembering Richard Hills

Eloy de Lera Acedo

Remembering Richard Hills

Denis Barkats

Remembering Richard Hills

Testimonials

Henning, Hales, Kneissl, Tuffs, Eales, Ward-Thompson

15:30 - 16:00 • Coffee break & Conference Photo

16:00 - 17:30

RICHARD HILL'S SESSION

Bill Dent

Remembering Richard Hills

Thijs de Graauw

Remembering Richard Hills

Testimonials

Scott, Chandler, Harris, Vlahakis, Goldsmith

John Calstrom REMOTE TALK

Remembering Richard Hills

Oliver Lay REMOTE TALK

Remembering Richard Hills

19:00 at St. Edmunds's College: drinks in the Garden Room followed by conference dinner in the Dining Hall, at 19:30

Thursday 25 April 2024

09:00 - 10:30

STAR FORMATION IN OUR GALAXY FROM THE ISM, VIA PRESTELLAR CORES (CHAIR: PAOLA CASELLI)

Thomas Henning

Star Formation: From Filaments to Disks

Rebecca Houghton

The star formation rate in Galactic Centre

clouds E/F using JWST data

Valentin Le Gouellec

Accretion properties of Class 0 protostars

studied with near-infrared spectroscopy

Ciarán Rogers

Star formation in extreme

environments. Accretion of pre-main

sequence stars in NGC 3603 with JWST

Andrew Rigby

Kinematics and core formation within

the centres of infrared-dark clouds

10:30 - 11:00 • Coffee break

11:00 - 12:30

STAR FORMATION IN OUR GALAXY FROM THE ISM, VIA PRESTELLAR CORES

Antonio Martínez-Henares

Modeling of the High-velocity Jet

Powered by the Massive Star MWC 349A

Alexander Christian Mayer

Formation of protostellar accretion disks with

non-ideal magnetohydrodynamics and turbulence

Michael Mattern

Understanding the Star Formation

Efficiency in Dense Gas: Initial Results

from the CAFFEINE Survey with ArTēMIS

David Eden

MAJORS : Massive, Active, JCMT-

Observed Regions of Star Formation

Eleonora Fiorellino

The Evolution of the Mass Accretion

Rate from Class I protostars to

Class II pre-main sequence stars

Poster Session

Werner, Olander, Nally

12:30 - 14:00 • Lunch

14:00 - 15:30

FUTURE FACILITIES (CHAIR: JAN SCHOLTZ)

Michele Cirasuolo REMOTE TALK

ESO's Extremely Large Telescope

Jake Connors REMOTE TALK

An overview of Far-Infrared Probe Missions

Eric Murphy

The next-generation Very Large Array: A

Transformative Step for Studies of Star Formation

Tyler Bourke

The SKA - Science & Status

15:30 - 16:00 • Coffee break

16:00 - 17:30

FUTURE FACILITIES

Liz Humphreys

ALMA in the Upcoming Decades

Manuel Aravena REMOTE TALK

The CCAT Observatory:

submillimeter astronomy at its highest

Lucia Pozzetti REMOTE TALK

Star formation near and far in the Era of Euclid

Pamela Klaassen

The Atacama Large Aperture

Single-dish Telescope (AtLAST)