A Celebration of CEMP and Gala of GALAH



Monday, 13 November 2017 - Friday, 17 November 2017 Monash University, Melbourne, Australia

Scientific Programme

Monday, November 13

9:00 - 9:30 Registration

9:30 - 9:45 Welcome (Head of School/Organizer)

Session I: Observations of CEMP Stars -- Part I

 $9:\!45$ - $10:\!30$ (P) Timothy Beers - The Discovery and Importance of Carbon-Enhanced Metal-Poor (CEMP) Stars

10:30 - 11:00 Coffee Break

11:00 - 11:20 (C) Terese Hanson - CEMP starts in Dwarf Galaxies

11:20 - 11:40 (C) Gary Da Costa - The SkyMapper Search for Extremely Metal-Poor Stars in the Galactic Halo

11:40 - 12:00 (C) Kaitlin Rasmussen - New CEMP Stars Identified from the RAVE Survey

12:00 - 12:20 (C) Onno Pols - Orbits of CEMP-s Binaries and what we can Learn from Them

12:20 - 14:00 Lunch Break

Session II: The GALAH Survey -- Part I

14:00 - 14:45 (P) Sarah Martell - Introduction to the GALAH Survey

14:45 - 15:15 (P) Yuan-Sen Ting - Theory of Chemical Tagging

15:15 - 15:35 (C) Jeffery Simpson - The GALAH Survey: Co-orbiting Stars and Chemical Tagging

15:35 - 16:00 (C) Lorenzo Spina - The Temporal Evolutio of Neutron-Capture Elements in the Galactic Disk

16:00 - 16:30 Coffee Break

16:30 - 16:50 (C) Kate Henkel - Thermohaline Mixing in Metal-Poor Red Giants

16:50 - 17:10 (C) Dongwook Lim - Multiple Stellar Populations in the Milky Way Bulge

17:10 Adjourn

19:00 Welcome Reception

Tuesday, November 14

9:00 - 9:30 Registration

Session III: Observations of CEMP Stars -- Part II

9:30 - 10:00 (P) Wako Aoki - CEMP-no Stars

10:00 - 10:30 (P) Camilla Hansen: Chemical Evolution Mapping of Pristine Gases through CEMP stars

10:30 - 11:00 Coffee Break

11:00 - 11:30 (P) Ian Roederer - Observations of CEMP-i Stars

11:30 - 11:50 (C) Aruna Goswami - Kinematics and Chemical Analysis of a Selected Sample of CH and CEMP Stars

11:50 - 12:10 (C) Marilia Carlos - The Rise of AGB Stars in the Galactic Halo

12:10 - 12:30 (C) Andreas Koch - Hidden Gems: Chemodynamic Characteristics of Obscure Low-Mass Globular Clusters

12:30 - 14:00 Lunch Break

Session IV: Theory of CEMP Stars -- Part I

14:00 - 14:30 (P) Alex Heger - Nucleosynthesis in the First Supernovae

14:30 - 15:00 (P) Simon Campbell - The Peculiar Evolution of Low-Mass EMP Stars

15:00 - 15:20 (C) Miho Ishigaki - Implications of Extremely Metal-Poor stars on the Masses of the First Stars

15:20 - 16:00 Coffee Break

16:00 - 16:20 (C) Ken'ichi Nomoto - Yields of Faint Pop III Supernovae and the Abundance Patterns of the Most Iron-Poor Stars

16:20 - 16:40 (C) Gen Chiaki - Formation Condition and Classification of Extremely Metal-Poor Stars: Absent Region in the A(C)-[Fe/H] Plane

16:40 - 17:00 (C) Projjwal Banerjee - New Neutron-Capture Site in First and Early Massive Stars as the Source of the Ubiquity of Heavy Elements and Diversity of Abundance Patterns in Metal-Poor Stars

17:00 - 17:20 (C) Jinmi Yoon - Searching for Ultra Metal-Poor Stars in the Outermost Halo

17:20 - 17:45 Poster Talks:

Alice Quillen - Migration on the shearing sheet Estimates for young open cluster migration

Alice Quillen - Time-domain spectroscopy at moderate spectroscopic resolution: What can we learn?

Silvia Rossi - Pruning Candidate Metal-Poor Stars with Gaia. I The HK and Hamburg/ESO Surveys A-Li Luo - Carbon-enhanced metal-por star candidates from LAMOST DR4

Jaehun Jeong - Distinct Kinematic Properties of the Galatic Halo System as Revealed by CEMP Giants

Miji Jeong - The Nature of First-Generation Stars as Revealed by Ultra Metal-Poor ([Fe/H]<-4.0) Stars

Hye-Eun Jang - Strong overabundances of alpha-elements in galactic metal poor stars Tadafumi Matsuno - Optical high resolution spectroscopy of young \$alpha\$-rich stars

17:45 Adjourn

Wednesday, November 15

Session V: Theory of CEMP Stars -- Part II

9:30 - 10:00 (P) Aurthr Choplin - Shedding Light on the First Stars with CEMP-no Stars

10:00 - 10:30 (P) Nozomu Tominaga - Supernova nucleosynthesis and extremely metal-poor stars

10:30 - 11:00 (P) Amanda Karakas - The slow neutron capture process and CEMP-s Stars

11:00 - 11:30 Coffee Break

11:30 - 12:00 (P) Melanie Hampel - The i Process and CEMP Stars

12:00 - 12:20 (C) Borbala Cseh - The Composition of Barium stars and the s-Process in AGB Stars

12:20 - 12:40 (C) Tilman Hartwig - The Distinct Chemical Signature of Single-Enriched Second-Generation Stars

12:40 - 13:00 (C) Richard Stancliffe - Mass and Angular Momentum Accretion in CEMP-s Stars

13:00 Afternoon Free

Thursday, November 16

Session VI: The GALAH Survey -- PART II

9:30 - 10:00 (P) Dennis Stello - GALAH and Asteroseismology

10:00 - 10:30 (P) Sven Buder - The GALAH Survey and Gaia

10:30 - 10:50 (P) Xudong Gao - Non-LTE abundance patterns in M67

10:50 - 11:30 Coffee Break

Session VII: CEMP Stars as First-Star Probes

11:30 - 12:00 (P) Else Starkenburg: First-Start Probes

12:00 - 12:30 (P) Richard Sarmento - Characterizing Pop III stars and the Transition to Metal-Enriched Star Formation

12:30 - 14:00 Lunch Break

Session VIII: Stellar Probes of Galaxy Evolution

14:00 - 14:30 (P) Chiaki Kobayashi - Galactic Chemical Evolution

14:30 - 15:00 (P) Brad Gibson - Confronting Simulations with Observations: The Good, The Bad, and the Ugly

15:00 - 15:30 U1 -- UNCONFERENCE Meetings -- GALAH

15:30 - 16:00 Coffee Break

16:00 - 17:00 U2 -- UNCONFERENCE Meetings -- CEMP

17:00 - 17:30 U3 -- Report from Unconference Chairs

17:30 Adjourn

19:30 Conference Dinner

Friday, November 17

Session IX: CEMP Stars as Early Universe Probes -- III

9:30 - 10:00 (P) Anna Frebel - Connections to Dwarf Galaxies

10:00 - 10:30 (P) Joss Bland-Hawthorne - CEMP Stars and Ultrafaint Dwarf Galaxies - The Lowest Mass Relics from before Reionization

10:30 - 11:00 (P) T. D. Le - White Dwarf Spectra for Studies of Time Variation of the Fine Structure Constant

11:00 - 11:30 Coffee Break

Session X: Future of GALAH and CEMP Research

11:30 - 12:00 (P) Sanjib Sharma - Future of GALAH + Related Surveys

12:00 - 12:30 (P) Young Sun Lee - The Future of CEMP Studies

12:30 - 13:00 (P) Ken Freeman - CEMP, GALAH Summary

13:00 Conference Ends