

CRAL Conference Series I – Chemodynamics 2006

Monday 10 July 2006

09:00 – 10:15 Registration / Coffee

Morning Chair: Eline Tolstoy

10:15 – 10:30 Welcome

Session I: Detailed stellar feedback processes in the Milky Way

10:30 – 11:15 **Review:** The Milky Way in a cosmological context

Nikos Prantzos

11:15 – 11:40 SPH simulations of the chemical enrichment of Local Group dwarfs

Emanuele Ripamonti

11:40 – 12:05 A new chemo-dynamical tool to study the evolution of galaxies in the local Universe

Nicolas Champavert

12:05 – 14:05 Lunch

Afternoon Chair: Greg Bryan

14:05 – 14:50 **Review:** Observational constraints on the chemical and dynamical evolution of galactic dwarf satellites

Michael Irwin

14:50 – 15:15 Star formation feedback and metal enrichment by SN Ia and SN II in dwarf spheroidal galaxies: the case of Draco

Andrea Marcolini

15:15 – 15:40 Chemical analysis of Fornax dSph with VLT/FLAMES

Bruno Letarte

15:40 – 16:05 Morphological evolution of disc galaxies in chemodynamical simulations

Leo Michel-Dansac

16:05 – 16:35 Coffee break / Poster session I

16:35 – 17:00 **Invited talk:** Modeling the ISM and feedback - Toward "numerical" Milky Way

Keiichi Wada

17:00 – 17:25 **Invited talk:** Chemodynamical models of barred galaxies

Hervé Wozniak

17:25 – 17:50 The large-scale bipolar wind in the Galaxy

Joss Bland-Hawthorn

Tuesday 11 July 2006

Morning Chair: Sabine Schindler

Session II: Self-regulation processes in the ISM of local and not so local galaxies

09:00 – 09:45 **Review:** The hot intrahalo medium of galaxies: observations vs theories

Daniel Wang

09:45 – 10:10 **Invited talk:** Dynamical self-regulating mechanisms

Françoise Combes

10:10 – 10:35 Recent star formation history of elliptical galaxies from GALEX

Sukyoung Yi

10:35 – 11:05 Coffee break / Poster session II

11:05 – 11:35 The Molecular Hydrogen Explorer (H2EX) space mission

François Boulanger

11:35 – 12:10 Metal rich droplets in HII regions: a scenario for the enrichment of the ISM

Grazyna Stasinska

12:10 – 14:10 Lunch

Afternoon Chair: Colin Norman

14:10 – 14:55 **Review:** The role of the ISM in galaxy formation

Greg Bryan

14:55 – 15:20 **Invited talk:** Simulating star formation on a galaxy scale

Adrianne Slyz

15:20 – 15:45 Supernovae feedback in galaxy simulations

Yohan Dubois

15:45 – 16:10 Star-formation regulation, gas cycles and the chemical evolution of dwarf irregular galaxies

Simone Recchi

16:10 – 16:40 Coffee break / Poster session II

16:40 – 17:05 A new chemodynamical galaxy formation model with radiative transfer

Akihiko Ibukiyama

17:05 – 17:30 Energy and metal deposit of massive stars to the interstellar medium

Gerhard Hensler

Wednesday 12 July 2006

Morning Chair: Keiichi Wada

Session III: The intra cluster medium as a laboratory for galaxy chemodynamics

09:00 – 09:45 **Review:** Metal enrichment in the ICM

Sabine Schindler

09:45 – 10:10 **Invited talk:** ICM enrichment: cosmological chemodynamics vs semi-analytic modelling

Brad Gibson

10:10 – 10:35 Numerical simulations of chemical enrichment

Luca Tornatore

10:35 – 11:05 Coffee break / Poster session III

11:05 – 11:50 **Review:** The chemical enrichment of the ICM from hydrodynamical simulations

Stefano Borgani

11:50 – 12:15 Cosmological simulations of IGM enrichment from galactic outflows

Benjamin Oppenheimer

12:15 – ... Free afternoon

Thursday 13 July 2006

Morning Chair: Andrea Ferrara

Session IV: Galaxy winds and inter galactic medium enrichment at intermediate redshifts

09:00 – 09:45 **Review:** How was the IGM enriched?

Anthony Aguirre

09:45 – 10:10 **Invited talk:** Abundances in high-velocity clouds

Philipp Richter

10:10 – 10:35 Metal evolution in galaxies and the IGM

Romeel Dave

10:35 – 11:05 Coffee break / Poster session IV

11:05 – 11:50 **Review:** Galactic winds, galaxy masses and metallicities at $1 < z < 3$

Dawn Erb

11:50 – 12:15 **Invited talk:** Damped Lyman- α systems at intermediate redshifts

Céline Péroux

12:15 – 14:15 Lunch

Afternoon Chair: Françoise Combes

14:15 – 14:40 Chemical abundances distributions in Milky Way-type galaxy halos

Andreea Font

14:40 – 15:05 **Invited talk:** GalICS: an hybrid approach to cosmological chemodynamics

Julien Devriendt

15:05 – 15:30 Galactic evolutionary path from primeval irregulars to present-day ellipticals

Masao Mori

15:30 – 15:55 Special, hardware accelerated, multi-phase chemodynamical SPH code for galaxy evolution

Peter Berczik

15:55 – 16:25 Coffee break / Poster session IV

Session V: First stars and early metal production

16:25 – 17:10 **Review:** Chemical feedback at cosmic dawn

Andrea Ferrara

17:10 – 17:35 Simulations of cosmic chemical enrichment with hypernovae

Chiaki Kobayashi

20:00 – ... Conference dinner

Friday 14 July 2006

Morning Chair: TBD

09:00 – 09:45 **Review:** Low metallicity stars in our Galaxy

Piercarlo Bonifacio

09:45 – 10:10 **Invited talk:** Chemical feedback and stellar IMF

Raffaella Schneider

10:10 – 10:35 **Invited talk:** Evolution of the first stellar generations

Raphael Hirschi

10:35 – 11:00 Distribution and chemical signatures of old and metal poor stars

Chris Brook

11:00 – 11:30 Coffee break / Poster session V

11:30 – 12:15 **Conference summary**

Colin Norman