SOUL OF HIGH-MASS STAR FORMATION

Puerto Varas, Chile
March 15–20, 2015

Sunday, March 15

16:00–20:00: Registration and Poster Setup at Hotel Cumbres

18:00–20:00: Welcome Reception at Hotel Cumbres

Monday, March 16

8:50–9:00: Welcome from Guido Garay

Session 1: Early stages Chair: Luis Felipe Rodriguez

9:00-9:45	**Thomas Henning**	**MPIA**	**Review on Observations of High Mass Star Formation**
9:45-10:00	Qizhou Zhang	CfA	Fragmentation of Molecular Clumps and Formation of Protoclusters
10:00-10:15	Adam Avison	UK-ARC	Constraining the mass and evolution of protostars in SDC335
10:15-10:30	Guillem Anglada	IAA-CSIC	Imaging signatures of infall motions in the G31.41 hot molecular core
10:30-10:40	Elise Servajean	Universidad de Chile	G305: Looking into a stellar maternity with ALMA
10:40-11:10	***Coffee break & posters***		

Session 2: Theory and Simulations Chair: Andrew Walsh

11:10-11:55	**Patrick Hennebelle**	**CEA-Saclay**	**Review on Theory and Simulations**
11:55-12:10	Enrique Vazquez-Semadeni	CRyA	Formation of massive stars in gravitationally collapsing clouds
12:10-12:25	Ian Bonnell (by Rowan Smith)	University of St Andrews	The formation of stellar clusters and massive stars
12:25-14:30	***Lunch***		
14:30-14:45	Robbie Banerjee	University of Hamburg	From Molecular Clouds to Massive Stars: Star Formation in Numerical Simulations
14:45-15:00	Javier Ballesteros-Paredes	CRyA	Gravity or turbulence? Dynamics, fragmentation and cloud structure
15:00-15:15	Rowan Smith	University of Manchester	Filamentary Accretion and Massive Star Formation
15:15-15:30	Matthias Gritschneder	University Observatory Munich	Stellar feedback and triggered stars—where are the soulmates?
15:30-15:40	Christine Koepferl	MPIA	A Reality Check: Testing measurements of Star-Formation Rates using Realistic Synthetic Observations

Session 3: Observations Chair: Jill Rathborne

15:40-15:55	Di Li	National Astronomical Observatories	What is a filament, anyway?—Shape, Density, Dynamics, and Psychology
15:55-16:10	Cristina Cappa	FCAG, UNLP e IAR, CONICET	IR dust bubble S24: Molecular gas and star formation
16:10-16:30	***Coffee break & posters***		
16:30-16:45	Joseph Mottram	Leiden Observatory	Cloud disruption via ionized feedback: testing simulations by tracing pillar dynamics in Vulpecula
16:45-17:00	Fabien Louvet	Universidad de Chile	Stellar formation efficiency at high densities
17:00-17:15	Jens Kauffmann	MPIfR	A Comprehensive High–Resolution Study of the Central Molecular Zone
17:15-17:30	Adam Ginsburg	ESO	The density structure in a massive cluster forming cloud
17:30-17:45	Shari Breen	CSIRO	Evidence for monolithic collapse of high-mass molecular cores in the infrared bubble G10.32-0.13
17:45-17:55	Carmen Juarez	CSIC-IEEC	A spectro-polarimetric study of the intermediate/high mass star forming region NGC 6334 V
17:55-18:05	Anna McLeod	ESO	The Pillars of Creation revisited with MUSE: gas kinematics and high-mass stellar feedback traced by optical spectroscopy
18:05-18:15	Fernando Olguin	University of Leeds	The circumstellar matter distribution of the proto-typical MYSO GL 2591

Tuesday, March 17

Session 4: Cores and Filaments Chair: Henrik Beuther

9:00-9:45	**Tushara Pillai**	**MPIfR**	**Review on Massive Filaments and Cores**
9:45-10:00	Gary Fuller	University of Manchester	Spitzer Dark Clouds: Filaments and Massive Star Formation
10:00-10:15	Ciriaco Goddi	Radboud University	Hot Ammonia in the Densest Massive Cores
10:15-10:25	Ashley Barnes	Liverpool John Moores University	Complex, coherent kinematics in a highly filamentary infrared dark cloud: The case of G034.43+00.24
10:25-11:00	***Coffee break & posters—Group Picture***		
11:00-11:15	Gemma Busquet	IAA-CSIC	Fragmentation in the Infrared Dark Cloud G14.225-0.506
11:15-11:30	Danae Polychroni	University of Athens	Nature vs Nurture: The relative importance of the Where and How in forming (massive) stars
11:30-11:45	Christian Hummel	ESO	Near and Mid-IR interferometry and sub-mm imaging and spectroscopy of a high-mass young stellar object near NGC 3603
11:45-12:00	Javier Rodon	ESO	The CMF of massive star-forming regions
12:00-12:10	Matias Lackington	University of Manchester	Deuteration in Infrared Dark Clouds
12:10-12:20	Vlas Sokolov	MPE	Deuterium fractionation tracing the evolution of IRDC cores
12:20-14:30	***Lunch***		

Session 5: Young Clusters Chair: Qizhou Zhang

14:30-15:15	**Steven Longmore**	**Liverpool John Moores University**	**Review on Massive clusters**
15:15-15:30	Esteban Morales	MPIA	Tracing massive star formation in the Galactic plane with embedded clusters and young stellar objects
15:30-15:45	Roberta Paladini	IPAC/Caltech	A Planck and Herschel view of Galactc high-mass star forming regions
15:45-16:00	Carlos Roman-zuniga	UNAM	Reconstruction of Star Cluster Forming Histories in Molecular Complexes
16:00-16:30	***Coffee break & posters***		
16:30-16:45	Jill Rathborne	CSIRO	A cluster in the making: ALMA reveals the initial conditions for high-mass cluster formation
16:45-16:55	Sarolta Zahorecz	ESO	What are the physical conditions at the earliest stage of massive star and star cluster formation?
16:55-17:05	Daniel Walker	Liverpool John Moores University	The Formation of Young Massive Clusters: A Monolithic or Sub-structured Process?
17:05-17:15	Anna Rosen	University of California	Gone with the Wind: Where is the Missing Wind Energy from Massive Star Clusters?

Session 6: Magnetic Fields Chair: Gary Fuller

17:15-17:30	Josep Girart	CSIC-IEEC	Magnetic fields in massive star forming regions: The SMA view
17:30-17:45	Gabriele Surcis	JIVE	Magnetic field measurements at AU scales around massive young stellar objects by using astronomical masers
17:45-17:55	Ka Ho Yuen	Chinese University of Hong Kong	Self-similar Fragmentation Regulated by Magnetic Fields in a Massive Star Forming Filament
17:55-18:05	Manuel Fernandez	Instituto Argentino de Radioastronomia	Zeeman Interferometric observations of CN(2-1) transitions with CARMA

Wednesday, March 18

Free day for excursions

Thursday, March 19

Session 7: Jets and Outflows Chair: Willem Jan de Wit

9:00-9:45	**Andres Guzman**	**Universidad de Chile**	**Review on Massive jets**
9:45-10:00	Igor Zinchenko	Institute of Applied Physics RAS	A sub-arcsecond study of the disk-outflow system in the S255IR area of high mass star formation
10:00-10:15	Luke Maud	Leiden University	A Distance Limited Sample of Massive Outflows
10:15-10:30	Pamela Klaassen	UK Astronomy Technology Centre	The Single Outflow from multiple HII regions
10:30-11:00	***Coffee break & posters***		
11:00-11:10	Viviana Rosero	NRAO	Ionized Jet Candidates Associated with Young High Mass Stars
11:10-11:20	Megan Reiter	University of Arizona	Powerful jets driven by intermediate-mass protostars in the Carina Nebula

Session 8: Masers Chair: Miguel Roth

11:20-11:35	Maxim Voronkov	CSIRO	Interferometric survey of southern class I methanol masers
11:35-11:50	Johan van der Walt	North-West University	A brief overview of the status of periodic methanol masers
11:50-12:05	Jeong-Sook Kim	NAOJ	Transition of the Outflow and associated Expanding H2O Maser Shell in the Massive Star-forming Region W75N
12:05-12:15	Jabulani Maswanganye	HartRAO/North-West University	New Periodic Variable Methanol Masers in Massive Star-Forming Regions
12:15-14:30	***Lunch***		

Session 9: Massive Disks Chair: Maite Beltran

14:30-15:15	**Henrik Beuther**	**MPIA**	**Review on Massive Disks**
15:15-15:30	Katharine Johnston	University of Leeds	An ALMA view of high-mass star formation in AFGL 4176
15:30-15:45	Luis Zapata	CRyA	A hot and compact disk around the O-type protostar IRAS 16547-4247 revealed by ALMA
15:45-16:00	Caterine Dougados	Universidad de Chile	Accretion-ejection processes in young intermediate mass stars
16:00-16:20	***Coffee break & posters***		

Session 10: Astrochemistry Chair: Josep M. Girart

16:20-16:35	Hendrik Linz	MPIA Heidelberg	Complex Organic Molecules (COMs) in early phases of higher-mass star formation
16:35-16:50	Takeshi Sakai	The University of Electro-Communications	DNC/HNC Ratio in Molecular Clumps
16:50-17:05	Yancy Shirley	University of Arizona	Deuteration in High-Mass Star-Forming Regions
17:05-17:20	Russell Shipman	SRON	The Water Story in IRDC Clumps
17:20-17:35	Ian Stephens	Boston University	High-mass Star-forming Clumps with Unusual N2H+/HCO+ Line Ratios
17:35-17:45	Sarah Fechtenbaum	Laboratoire d'Astrophysique de Bordeaux	CygX-N63: the astrochemical link between dark clouds and hot cores ?
17:45-17:55	Siyi Feng	MPIA	Chemical substructures in high-mass star-forming regions

Transport to Frutillar

Conference Dinner–Teatro del Lago

Friday, March 20

Session 11: Milky Way Surveys Chair: Guido Garay

9:00-9:15	Manuel Merello	IAPS-INAF	A Herschel view of massive star formation on the outer Galaxy
9:15-9:30	James Jackson	Boston University	The MALT90 Molecular Line Survey
9:30-9:45	Yanett Contreras	CSIRO	MALT90: Unveiling its treasures
9:45-10:00	Mark Thompson	University of Hertfordshire	Latest results from the SCUBA-2 Ambitious Sky Survey
10:00-10:15	James Urquhart	MPIfR	ATLASGAL: Galaxy-wide Sample of Embedded Massive Stars
10:15-10:30	Andrew Walsh	ICRAR	OH and H2O maser surveys of the Galaxy
10:30-11:00	***Coffee break & posters***		
11:00-11:15	Timea Csengeri	MPIfR	The first Galaxy scale hunt for high-mass protostars
11:15-11:25	Andrew Rigby	Liverpool John Moores University	The 13CO/C18O (J=3-2) Heterodyne Inner Milky Way Plane Survey (CHIMPS)
11:25-11:35	Brian Svoboda	Steward Observatory	Physical Properties of Massive Star-Forming Clumps in Different Evolutionary Stages from the Bolocam Galactic Plane Survey
11:35-11:45	Simon Bihr	MPIA	THOR - The HI, OH and recombination line survey of the Milky Way

Session 12: Inner Galaxy and Magellanic Clouds Chair: Diego Mardones

11:45-12:30	**Elisabeth Mills**	**NRAO**	**Review on Central Molecular Zone**
12:30-14:30	***Lunch, remove posters***		
14:30-14:45	Cara Battersby	CfA	The SMA Legacy Survey of the Central Molecular Zone
14:45-15:00	Katharina Immer	ESO	Gas temperature structures of Galactic center clouds
15:00-15:15	Monica Rubio	Universidad de Chile	Molecular clouds at ALMA resolution in the Magellanic Bridge
15:15-15:25	Nayak Omnarayani	Johns Hopkins University	ALMA Observations of the Large Magellanic Cloud

Summary

15:30-16:00	**Luis Felipe Rodriguez**	**CRyA**	**Conference Summary**