# PROGRAMME FOR "THE WONDERS OF STAR FORMATION" EDINBURGH, 3 - 7 September, 2018

### Sunday, 2 September 2018

HansFest

Time	EVENT
18:00-20:00	Reception at John McIntyre Conference Centre

## Monday, 3 September 2018 (morning)

HansFest

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Time	Speaker	Title/Event
Chair:	Mark McCaughrean	
09:00-09:20	Ken Rice & Andrea Lagarini	Welcome to HansFest
		Molecular Clouds and Filaments
09:20-10:00	Sarah Ragan	Molecular Clouds and Filaments (invited review)
10:00-10:20	Paul Clark	Can we use [CII] to trace the formation of molecular clouds?
10:20-10:40	Jürgen Stutzki	[13CII] and 12CII] observations: optical depth effects and $C^+$ column-densities
10:40-11:10		COFFEE BREAK AND POSTERS
11:10-11:30	Nicola Schneider	[OI] 63 micron observations of S106 with upGREAT/SOFIA
11:30-11:50	Caroline Gieser	Chemical complexity of AFGL 2591
11:50-12:10	Kazunari Iwasaki	The formation of molecular clouds by compression of two-phase atomic gases
12.10-12:30	Shu-ichiro Inutsuka	The formation and evolution of filamentary molecular clouds and star formation
12:30-12:50	Toshikazu Onishi	High-mass star formation in GMCs in the Magellanic Clouds
12:50-14:00		LUNCH BREAK

HansFest

TIME	Speaker	Title/Event
19.50 14.00		
12:30-14:00		LUNCH BREAK
Chair:	Pamela Klaassen	
14:00-14:20	Matthew Povich	X-raying the bones of the Milky Way: accelerating star formation rates in infrared dark clouds
14:20-14:40	Enrique Vázquez-Semadeni	Hoyle fragmentation in turbulent molecular clouds: sequential onset of contraction on successively smaller scales
14:40-15:00	Jin Koda	ALMA CO absorption study – smallest GMC structures
15:00-15:20	Thierry Montmerle	Molecular cloud ionisation: where are the cosmic rays?
15:20-15:50		COFFEE BREAK AND POSTERS
		Low-Mass Star Formation
15:50-16:10	Derek Ward-Thompson	The wonders of magnetic fields in star-forming regions
16:10-16:30	James Wurster	$Low-mass\ star\ formation\ and\ non-ideal\ magnetohydrodynamics$
16:30-16:50	Yusuke Aso	ALMA observations of Serpens Main: protostellar evolution at the Class 0 stage
		Capturing the Spirit of Hans
16:50-17:10	Cathie Clarke	An overview of Hans's many contributions to astronomy
17:10-17:30	Hal Yorke	SOFIA today and tomorrow
17:45-18:00 18:00-20:30		BUSES TO WINE AND CHEESE AT THE OBSERVATORY, BLACKFORD HILL (limited spaces available)

## Tuesday, 4 September 2018

Time	Speaker	Title/Event
Chair:	Erick Young	
		Low-Mass Star Formation (continued)
09:00-09:20	Alison Young	Synthetic molecular-line observations of the first hydrostatic core
09:20-09:40	Birgit Hasenberger	A physically motivated dense-core extraction technique applied to Herschel/Planck observations
09:40-10:00	Evgenia Koumpia	The chemical structure of the Class 0 protostellar envelope NGC 1333 IRAS 4A
10:00-10:20	Kazuki Tokuda	A detailed ALMA study of an early stage protostar formation in a highly dynamical dense core
		High-Mass Star Formation
10:20-10:40	Rolf Kuiper	Accretion and feedback in the formation of massive stars
10:40-11:10		COFFEE BREAK AND POSTERS
11:10-11:30	Kei Tanaka	Theoretical modelling of massive star formation
11:30-11:50	Anna Rosen	The formation of massive stars with radiative and protostellar outflow feedback
11:50-12:10	Robi Banerjee	Formation of high-mass stars and magnetic fields
12:10-12:30	Ian Bonnell	Competitive accretion and the formation of high-mass stars in clusters
12:30-12:50	Katharine Johnston	A high-resolution picture of fragmentation and accretion in the AFGL 4176 disc
12:50-14:00		LUNCH BREAK
Chair:	Phil Lucas	
14:00-14:20	Rene Oudmaijer	The formation and evolution of the intermediate-mass pre-Main Sequence Herbig Ae/Be stars
14:20-14:40	Göran Sandell	NGC7538 – our key to understanding high-mass star formation
14:40-15:00	Joana Oliveira	Herschel spectroscopy of massive YSOs in the Magellanic Clouds
15:00-15:20	Monica Rubio	Massive YSOs in star forming regions in the Magellanic Clouds
15:20-15:50		COFFEE BREAK AND POSTERS
15:50-16:10	Stuart Lumsden	Radio jets from massive protostars as a probe of evolution
16:10-16:30	Steffi Walch	Molecular cloud formation and dispersal by stellar feedback
		Jets and Outflows
16:30-16:50	Jennifer Wiseman	HH212: the most beautiful jet
16:50-17:30	John Bally	The Challenges Ahead, I (open forum)

## Wednesday, 5 September 2018

Time	Speaker	Title/Event
Chair:	Monika Petr-Gotzens	
09:00-09:40	Sylvie Cabrit	Jets and outflows (invited review)
09:40-10:00	Bo Reipurth	Herbig-Haro flows from multiple stellar systems
10:00-10:20	Tom Geballe	Highly Excited Molecular Hydrogren in Herbig-Haro 7
10:20-10:40	Larisa Tambovtseva	Studies of young stars with accretion, and outflow-tracing spectral lines
10:40-11:10		COFFEE BREAK AND POSTERS
11:10-11:30	Bringfried Stecklum	A wonder of star formation - watching a massive star grow
11:30-11:50	Vladimir Grinin	The UX Ori type activity in young cool stars
		Triggering and Feedback from Massive Stars
11:50-12:10	Sam Geen	The (Un)predictability of star formation on a cloud scale
12:10-12:30	Pamela Klaassen	Carina's pillars of destruction: the view from ALMA
		Reminiscences
12:30-13:00	Hans Zinnecker	My passion for star formation (and the ISM)
13:00-14:00		Lunch
		<b>Excursions, etc.</b> (see conference website for more details)
14:30-16:30		Geological Walk up Arthur's Seat
		The Scotch Whisky Experience
		VISIT TO MARY KING'S CLOSE
19:00-23:00		Conference Dinner at the Playfair Library, Old College

TIME	Speaker	Title/Event
Chair:	Sergei Nayakshin	
		Triggering and Feedback from Massive Stars (continued)
09:00-09:20	Yasuo Fukui	Triggered star formation
09:20-09:40	Chris Wareing	MHD simulation of cloud formation by thermal instability and consequent massive star feedback
09:40-10:00	Franta Dinnbier	Disentangling the relative contributions of supernovae, stellar winds, and ionising radiation on shaping the structure of galactic discs
10:00-10:20	Jan Palouš	Gould's Belt and beyond - II
10:20-10:40	Jonathan Tan	Massive star formation
10:40-11:10		COFFEE BREAK AND POSTERS
		Multiple Systems
11:10-11:50	John Tobin	Revolutionising our view of disk and multiple star formation: new frontiers explored by ALMA and the VLA (invited review)
11:50-12:10	Stefan Kraus	VLTI imaging of a high-mass proto-binary system: unveiling the dynamical processes in high-mass star formation
12:10-12:30	Rainer Köhler	Pre-main-sequence binaries and the origin of field stars
12:30-12:50	Bob Mathieu	An observational study of accretion flows in short-period pre-Main Sequence binaries
12:50-14:00		LUNCH BREAK
Chair:	Steve Beckwith	
		Clusters
14:00-14:40	Richard Parker	Clusters (invited review)
14:40-15:00	Bernhard Brandl	Studying star and planet formation with METIS on the ELT
15:00-15:20	Peter Schilke	Formation of clusters containing high-mass stars
15:20-15:50		COFFEE BREAK AND POSTERS
15:50-16:10	Anne Buckner	Dance of the stars: an analysis of the spatial evolution in two clusters
16:10-16:30	Oliver Lomax	Modelling the structure of star clusters with fractional Brownian motion
16:30-16:50	Becky Arnold	Quantifying velocity structure in star forming regions
16:50-17:30	John Bally	The Challenges Ahead, II (open forum)

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Time	Speaker	Title/Event
Chair:	Mary Barsony	
		Clusters (continued)
09:00-09:20	Amelia Stutz	Cluster formation in Orion
09:20-09:40	César Briceño	Stellar demographics in Orion
09:40-10:00	Karolina Kubiak	On the nature of the Orion Belt Population sources
10:00-10:20	Genevieve Parmentier	Three star formation relations (and strengthened cluster survival) with one single model
10:20-10:40	Christina Schoettler	Making runaways: the ejection of stars from clusters due to dynamical evolution
10:40-11:10		COFFEE BREAK AND POSTERS
11:10-11:30	Richard Wünsch	The origin of globular clusters and their multiple populations
		The Galactic Context
11:30-11:50	Bruce Elmegreen	Star formation over cosmic time
11:50-12:10	Diederik Kruijssen	The physics encoded by the star formation relation
		The IMF
12:10-12:30	Mélanie Chevance	A systematic characterisation of the evolutionary cycling between molecular clouds, star formation, and feedback in nearby galaxies
12:30-12:50	Patrick Hennebelle	What sets the stellar Initial Mass Function?
12:50-14:00		LUNCH BREAK
Chair:	Ken Rice	
14:00-14:20	John Bally	Outflow structure, N-body interactions, and the origin of the IMF
14:20-14:40	Henrik Beuther	Fragmentation and disk formation in high-mass star formation
14:40-15:00	Philippe André	The Role of Molecular Filaments in the Origin of the IMF
15:00-15:20	Matthew Bate	The origin and variation of the stellar Initial Mass Function
15:20-15:50		COFFEE BREAK AND POSTERS
15:50-16:10	Nicolas Lodieu	The photometric and astrometric mass functions in galactic open clusters
16:10-16:30	Morten Andersen	The formation of massive star clusters and their IMF
16:30-16:50	Simon Glover	The Initial Mass Function of Population III stars: where do we stand?
		Capturing the Spirit of Hans
16:50-17:10	Eric Becklin	Thirty six years of adventures in observational star formation with Hans Zinnecker
17:10-17:30	Mark McCaughrean & John Rayner	Hans Zinnecker: Astronomer, Colleague and Friend
		FAREWELL