

IAUS 328  
**LIVING AROUND ACTIVE STARS**

17-21 October, 2016  
Mareias, Brazil

**PROGRAM OVERVIEW**

<b>Time (Hrs)</b>	<b>Sunday 16 October</b>	<b>Monday 17 October</b>	<b>Tuesday 18 October</b>	<b>Wednesday 19 October</b>	<b>Thursday 20 October</b>	<b>Friday 21 October</b>
<b>0900–1030</b>	<i>Arrival of Participants</i>	<i>Session 1A</i>	<i>Session 1E</i>	<i>Flash Poster</i>	<i>Session 3B</i>	<i>Session 4B</i>
<b>1030–1100</b>		<i>Coffee Break</i>	<i>Coffee Break</i>	<i>Coffee Break</i>	<i>Coffee Break</i>	<i>Coffee Break</i>
<b>1100–1230</b>		<i>Session 1B</i>	<i>Session 2A</i>	<i>Session 3A</i>	<i>Session 3C</i>	<i>Session 4C</i>
<b>1230–1400</b>		<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>
<b>1400–1530</b>		<i>Session 1C</i>	<i>Session 2B</i>	<i>Free time for conference excursion</i>	<i>Session 3D</i>	<i>Session 4D</i>
<b>1530–1600</b>		<i>Coffee Break</i>	<i>Coffee Break</i>		<i>Coffee Break</i>	<i>Coffee Break</i>
<b>1600–1730</b>			<i>Session 1D</i>	<i>Session 2C</i>	<i>Session 4A</i>	<i>Closing</i>
<b>1900–2000</b>	<i>Registration</i>	<i>Poster Session</i>	<i>Poster Session</i>		<i>Poster Session</i>	<i>Posters Down</i>
<b>2000–2200</b>	<i>Reception</i>	<i>Dinner</i>	<i>Dinner</i>	<i>Dinner</i>	<i>Dinner</i>	
<b>2100–2300</b>				<i>Luau</i>		

Session 1: Solar and Stellar Activity  
Session 2: Heliospheric and Astrospheric Environments  
Session 3: Coupled Star-Planet Evolution  
Session 4: Exoplanets, Habitability and Life  
Flash Poster: Rapid Overview of all Poster Presentations

## DETAILED SCIENTIFIC PROGRAM

### **Conference Opening**

*SOC Chair (Dibyendu Nandi) and LOC Chair (Adriana Valio)  
08:30, Monday, 17 October, 2016*

### **Session 1: Solar and Stellar Activity**

*Convener: Allan Sacha Brun  
(Monday 0900 to Tuesday 1030)*

<i>Time</i>	<i>Speaker</i>	<i>Title</i>	<i>Status</i>
<b>Monday, 17 October</b>		<b>1a: Solar-Stellar Magnetism</b>	
9:00-9:30	A. Strugarek	The puzzling dynamo of stars: recent progress with global numerical simulations	I
9:30-9:45	R. Yadav	Dynamo simulations for fully convective M stars	C
9:45-10:00	Bonnie Romano Zaire	How does the internal structure of young stars determine their magnetic topology?	C
10:00-10:15	R. Roettenbacher	Imaging Global Stellar Magnetism to Shift the Starspot Paradigm	C
10:15-10:30	Moderator	Discussion	C
10:30-11:00	COFFEE BREAK	COFFEE BREAK	
		<b>1b: Solar-Stellar Radiative Variability</b>	

11:00-11:30	A. Shapiro	Connecting solar and stellar brightness variations	I
11:30-11:45	I. Busa	A new pressure component in the chromosphere of active stars?'	C
11:45-12:00	S. de Souza e Almeida Silva	Influence of different heat flux formulations on the thermal evolution of a solar active region	C
12:00-12:15	Andreas Quirrenbach	M Dwarfs and their Planets - First Results from CARMENES	C
12:15-12:30	Moderator	Discussion	
12:30-14:00	LUNCH BREAK	LUNCH BREAK	
		<b>1c: Activity Extremes and Super Flares</b>	
14:00-14:30	H. Maehara	Starspot activity and superflares on solar-type stars	I
14:30-14:45	J. Carlo Santos	Spectral behavior of photospheric magnetic field during solar flares	C
14:45-15:00	C. Alastair	Magnetic activity of interacting binaries	C
15:00-15:15	Moderator	Discussion	
15:15-15:45	COFFEE BREAK	COFFEE BREAK	
		<b>1d: Solar-Stellar Connection</b>	
15:45-16:00	G. Guerrero	Are tachoclines important for solar and stellar dynamos?	C
16:00-16:15	S. Mahajan	Can Torsional Oscillations Indicate the Location of Stellar Magnetic Field Production?	C
16:15-16:30	A. Valio	Starspots properties and stellar activity from planetary transits	C
16:30-16:45	Raissa de Lourdes Freitas Estrela	Using planetary transits to estimate magnetic cycles of Kepler stars	C

16:45-17:00	Sudeshna Boro Saika	A solar-like magnetic cycle for the K dwarf 61 Cyg A	C
17:00-17:15	Constance emirau-Viard	Dynamo Action and Magnetic Activity during the pre-main sequence: influence of rotation and structural changes	
17:15-17:30	Moderator	Discussion	
<b>Tuesday, 18 October</b>		<b>1d: Solar-Stellar Connection</b> (Continued)	
9:00-9:30	L. Jouve	What do numerical simulations tell us about the solar and stellar dynamos?	I
9:30-9:45	Maria Ann Weber	Simulations of Magnetic Flux Emergence in Cool Star Interiors	C
9:45-10:00	Sarah Gibson	Beyond Sunspots: Studies Using a Newly Digitized Archive of Global Solar Magnetic Field Patterns	C
10:00-10:15	C. James Marvin	Measurements of absolute Calcium II H and K flux for M dwarfs	C
10:15-10:30	Moderator	Discussion	
10:30-11:00	COFFEE BREAK	COFFEE BREAK	

## ***Session 2: Heliospheric and Astrospheric Environments***

*Convener: Aline Vidotto  
(Tuesday 1100 to 17:30)*

<i>Time</i>	<i>Speaker</i>	<i>Title</i>	<i>Status</i>
<b>Tuesday, 18 October</b>		<b>2A: Solar and Stellar Coronae and Winds</b>	
11:00-11:30	Moira Jardine	Solar and Stellar Coronae and Winds	I
11:30-11:45	Carolina Villarreal D'Angelo	On the influence of magnetic fields in a neutral planetary wake	C
		<b>2B: Interplanetary Storm and Energetic Particles</b>	
11:45-12:00	Heidi Korhonen	Hunting for Stellar Coronal Mass Ejections	C
12:00-14:00	LUNCH BREAK	LUNCH BREAK	
		<b>2c, d. Forcing of Planetary Atmospheres and Magnetospheres; Space Climate Consequences</b>	
14:00-14:30	Anil Bhardwaj	Influence of Solar Weather on Planetary Environments	I
14:30-14:45	Christopher T. Russell	Carrington-Class Events and How to Recognize Them	C
14:45-15:00	Janet Luhmann	Space Weather Storm Responses at Mars	C
15:00-15:30	Colin Johnstone	Forcing of Planetary Atmospheres and Magnetospheres	I
15:30-16:00	COFFEE BREAK	COFFEE BREAK	
16:00-16:15	A. S. Brun	Exo Space Weather	C
16:15-16:45	Pablo Mauas	Solar activity forcing of terrestrial hydrological phenomena	I
16:45-17:15	Moderator	Discussion	

### **Session 3: Coupled Star-Planet Evolution**

Convener: Heidi Korhonen

(Wednesday 1100 to Thursday 1530)

<i>Time</i>	<i>Speaker</i>	<i>Title</i>	<i>Status</i>
<b>Wednesday 19 October</b>		<b>3a</b>	
11:00-11:30	Eiichiro Kokubo	Formation of Planetary Systems	I
11:30-11:45	Louise Fey Yu	Hunting for hot Jupiters around young active stars,	C
11:45-12:00	Pascal Petit	A maximum-entropy approach to detect hot Jupiters around young main sequence Sun-like stars	C
12:00-12:15	Heidi Korhonen	Discussion	
12:15-14:00	LUNCH BREAK	LUNCH BREAK	
<b>Thursday 20 October</b>		<b>3b</b>	
09:00-09:30	Scott G. Gregory	The long-term evolution of stellar activity	I
09:30-09:45	Dibyendu Nandi	Solar-Stellar Magnetic Variability over Different Timescales	C
09:45-10:00	Jorge Melendez	New relations between rotation, activity and age in Sun-like stars	C
10:00-10:30	Nicholas James Nelson	Stellar Midlife Crises: Sharp Changes in Dynamo Action for Sun-like Stars Near the Solar Rotation Rate	I, Metcalf Lecturer
10:30-11:00	COFFEE BREAK	COFFEE BREAK	
<b>Thursday 20 October</b>		<b>3c</b>	

11:00-11:15	Sudeshna Boro Saikia	Goettingen chromospheric activity database: Long term activity vs rotation of cool stars	C
11:15:-11:30	Scott Wolk	Observed Effects of Star-Planet Interaction	C
11:30-11:45	Andrew Collier Cameron	Tidal sculpting in the hot-Jupiter mass-separation diagram	C
11:45-12:00	Pascal Petit	Discussion	
12:00-14:00	LUNCH BREAK	LUNCH BREAK	
		<b>3d</b>	
14:00-14:30	Stephen Marsden	The Early, Young and Active Sun	I
14:30-14:45	Colin Alastair Hill	Magnetic Fields of Weak-Line T Tauri Stars	C
14:45-15:00	Theresa Lueftinger	Cool stars magnetic fields and their influence on the habitability of surrounding planets	C
15:00-15:15	Heidi Korhonen	Discussion	

## **Session 4: Exoplanets, Habitability and Life**

Convener: Dibyendu Nandi  
(Thursday 1600 to Friday 1530)

<i>Time</i>	<i>Speaker</i>	<i>Title</i>	<i>Status</i>
<b>Thursday 20 October</b>		<b>4a</b>	
15:45-16:15	Manuel Guedel	Astrophysical Environments and the Origin of Life	I
16:15-16:30	Ximena Abrevaya	Astrobiology, Stellar Radiation and the Quest of Life	C
16:30-16:45	Mekhi Dhesi	Twinkle - A Low Earth Orbit Visible and Infrared Exoplanet Spectroscopy Observatory' instead of just 'TWINKLE'	C
16:45-17:15	Petrus Martens	Discussions	C
<b>Friday 21 October</b>		<b>4b</b>	
09:00-09:30	Vladimir Airapetian	The Environment of the Young Earth in the Perspective of the Young Sun	I
09:30-09:45	Petrus Martens	The Faint Young Sun and Faint Young Stars Paradox	C
09:45-10:00	Aline Vidotto	The effects of M dwarf magnetic fields and winds on potentially habitable planets	C
10:00-10:15	Fabio Del Sordo	Estimating sizes of ExoEarth Magnetospheres	C
10:15-10:30	Dibyendu Nandi	Discussions	
10:30-11:00	COFFEE BREAK	COFFEE BREAK	
		<b>4c</b>	
11:00-11:30	Ricky Egeland	Evolution of Chromospheric Activity in Solar	I,

		Analogs	Metcalf Lecturer
11:30-11:45	Joe Llama	The Impact of Stellar Activity on High Energy Exoplanet Transits	C
11:45-12:00	Patricia Cruz	Detection of Secondary Eclipses of WASP-10b and QATAR-1b in the Ks-Band	C
12:00-12:15	Adriana Valio	Discussions	C
12:15-14:00	LUNCH BREAK	LUNCH BREAK	
		<b>4c</b>	
14:00-14:30	José-Dias do Nascimento Jr.	The Solar Proxy k1 ceti and the Planetary Habitability of the Young Sun when Life arose on Earth	I
14:30-14:45	Kristina Kislyakova	Electromagnetic induction heating of planetary interiors in the habitable zones of active stars	C
14:45-15:00	Subhanjoy Mohanty	Habitability of Terrestrial-Mass Planets in the HZ of M Dwarfs: H/He Dominated Atmospheres	C
15:00-15:30	Dibyendu Nandi	Discussions	C
15:30-16:00	COFFEE BREAK	COFFEE BREAK	
16:00-17:30	SOC, LOC	Closing Session	