

# GAPS 2021 – Scientific Program

14–18 June 2021

TIMES ARE IN UTC

(To convert to your time zone: <https://www.thetimezoneconverter.com/>)

## Day 1 – 14 June 2021

UTC Start Time	Session	Speaker	Talk Title	Session Chair
<b>1:00-1:10 PM</b>	Welcome to GAPS 2021	Gioia Rau & Jacco Van Loon	Introduction & welcome!	
<b>1:10-1:25 PM</b>	1. Internal structure, mixing processes, and evolution	Eoin Farrell	The Uncertain Masses of Red Supergiants	Jacco van Loon
<b>1:25-1:40 PM</b>	1. Internal structure, mixing processes, and evolution	Charly Pinçon	The internal properties of Red Giants as revealed by mixed oscillation modes	Jacco van Loon
<b>1:40-2:10 PM</b>	1. Mediated Discussion			Jacco van Loon
<b>2:10-2:40 PM</b>	Break			
<b>2:40-2:55 PM</b>	2. Nucleosynthesis and meteoritic evidence	Randa Asa'd	On the precision of RSG metallicity determination	Maria Lugaro
<b>2:55-3:10 PM</b>	2. Nucleosynthesis and meteoritic evidence	Diego Vescovi	Presolar grains from AGB stars	Maria Lugaro
<b>3:10-3:40 PM</b>	2. Mediated Discussion			Maria Lugaro

## Day 2 – 15 June 2021

UTC Start Time	Session	Speaker	Talk Title	Session Chair
1:00-1:10 PM	Welcome/Announcements			
1:10-1:25 PM	3. Atmospheric and circumstellar structure, dust formation	Taïssa Danilovich	Circumstellar structure and dust formation	Gioia Rau
1:25-1:40 PM	3. Atmospheric and circumstellar structure, dust formation	Markus Wittkowski	Investigating mass loss from RSG and AGB stars: Interferometric imaging of surfaces and dust formation zones	Gioia rau
1:40-2:10 PM	3. Mediated discussion			Gioia Rau
2:10-2:40 PM	Break			
2:40-2:55 PM	4. Instabilities	Jared Goldberg	3D Radiation Hydrodynamical Simulations of Red Supergiant Envelopes and 1D Insights	Emily Levesque
2:55-3:10 PM	4. Instabilities	Gioia Rau	Chromospheres in cool evolved stars	Emily Levesque
3:10-3:40 PM	4. Mediated discussion			Emily Levesque

## Day 3 – 16 June 2021

UTC Start Time	Session	Speaker	Talk Title	Session Chair
1:00-1:10 PM	Welcome/Announcements			
1:10-1:25 PM	5. Feedback (mass loss)	Holly Andrews	Mysteries of mass loss: a crucial factor for stellar evolution	Tomasz Kamiński
1:25-1:40 PM	5. Feedback (mass loss)	Sofia Ramstedt	Wind gas-to-dust ratios - The need for better constraints	Tomasz Kamiński
1:40-2:10 PM	5. Mediated discussion			Tomasz Kamiński
2:10-2:40 PM	Break			
2:40-2:55 PM	6. End products	Emma Beasor	The mass loss of red supergiants	Marcelo M. Miller Bertolami
2:55-3:10 PM	6. End products	David Jones	Open questions in planetary nebula research	Marcelo M. Miller Bertolami
3:10-3:40 PM	6. Mediated discussion			Marcelo M. Miller Bertolami

## Day 4 – 17 June 2021

UTC Start Time	Session	Speaker	Talk Title	Session Chair
1:00-1:10 PM	Welcome/Announcements			
1:10-1:25 PM	7. Interaction with stellar and planetary companions	Hila Glanz	Common envelope ejection: challenges and suggested solutions	Keiichi Ohnaka
1:25-1:40 PM	7. Interaction with stellar and planetary companions	Kathryn Neugent	Red Supergiants and their Binary Companions: Interactions, Mergers, and More!	Keiichi Ohnaka
1:40-2:10 PM	7. Mediated discussion			Keiichi Ohnaka
2:10-2:40 PM	Break			
2:40-2:55 PM	8. Importance for ISM chemistry and the role of laboratory astrophysics	Lars Mattsson	The importance of gas-dust drift in AGB winds	Aníbal Garcia-Hernandez
2:55-3:10 PM	8. Importance for ISM chemistry and the role of laboratory astrophysics	Marie Van de Sande	Bridging the gaps between observations and theory	Aníbal Garcia-Hernandez
3:10-3:40 PM	8. Mediated discussion			Aníbal Garcia-Hernandez

## Day 5 – 18 June 2021

UTC Start Time	Session	Speaker	Talk Title	Session Chair
1:00-1:10 PM	Welcome/Announcements			
1:10-1:25 PM	9. Diagnostics in nearby and distant galaxies	Ambra Nanni	Unveiling dust around evolved stars: constraints and relevance for the infrared emission of spatially unresolved galaxies	Biwei Jiang
1:25-1:40 PM	9. Diagnostics in nearby and distant galaxies	Steven Goldman	A Wealth Beyond: The Frontiers of Extragalactic Evolved-Star Science	Biwei Jiang
1:40-2:10 PM	9. Mediated discussion			Biwei Jiang
2:10-2:40 PM	Break			
2:40-2:55 PM	10. Final discussion	Patricia Whitelock	Unsolved Problems in Red Giants	Gioia Rau & Jacco van Loon
2:55-3:10 PM	10. Final discussion	Philip Massey	Unsolved Problems in Red Supergiants	Gioia Rau & Jacco van Loon
3:10-3:40 PM	10. Mediated final discussion			Gioia Rau & Jacco van Loon
3:40-3:50	Closing	Gioia Rau & Jacco van Loon		