

# The 2026 Spring Symposium

## The Metal-Poor Frontier: Understanding Low-Metallicity Stars and Galaxies Across Cosmic Time

May 11-15, 2026 at Space Telescope Science Institute – Schedule of Events

### Monday, May 11, 2026

Time	Title	Speaker	Location
8:15am	<ul style="list-style-type: none"> <li>Coffee and Snacks (Café)</li> <li>Speaker Tech Check for Session 1 (Auditorium)</li> </ul>		
<b>Session 1, Chair: Calum Hawcroft, Moderator: Macarena Garcia del Valle-Espinosa</b>			
9:00am	Welcome Address	STScI Director + SOC Chairs	Auditorium
9:15am	All the Zs: Connecting stars and gas across the low and high redshift metal-poor Universe	Peter Senchyna	Auditorium
9:45am	Constraining the properties of young stellar pops. and nebular gas in extremely metal-poor galaxies	Aida Wofford	Auditorium
10:00am	Unravelling the nature of the He II-emitting sources in IZw 18 from deep HST narrow-band imaging	Linda Smith	Auditorium
10:15am	What are the properties and nature of N-emitters ?	Daniel Schaerer (V)	Auditorium
10:30am	<ul style="list-style-type: none"> <li>Coffee Break (Café)</li> <li>Speaker Tech Check for Session 2 (Auditorium)</li> </ul>		
<b>Session 2, Chair: Calum Hawcroft, Moderator: Macarena Garcia del Valle-Espinosa</b>			
11:00am	Metal-poor massive stars	Paul Crowther	Auditorium
11:30am	Wolf-Rayet stars at low metallicity: Different and enigmatic	Andreas Sander	Auditorium
11:45am	Binary Products as Ionizing Sources: Testing Novel Models Across Cosmic Time	Beryl Hovis-Afflerbach	Auditorium
12:00pm	<ul style="list-style-type: none"> <li>Lunch (Café)</li> <li>Speaker Tech Check for Session 3 (Auditorium)</li> </ul>		
<b>Session 3, Chair: Linda Smith Moderator: Macarena Garcia del Valle-Espinosa</b>			
1:15pm	O/H No! Metal-Poor Galaxies at the Extremes of Ionizing Spectra, Nebular Conditions, and Chemical Enrichment	Danielle Berg	Auditorium
1:45pm	Exploring Stellar Feedback Suppression in Metal-Poor Galaxies: New Insights from NGC 5253	Svea Hernandez	Auditorium
2:00pm	The Nitrogen Exception: Feedback and Chemical Decoupling in Low-Metallicity Galaxies	Bethan James	Auditorium
2:15pm	The LBT Yp Project and MIRAGE: Physics and Multi-Element Chemistry of Extremely Metal-Poor Galaxies	Noah Rogers	Auditorium
2:30pm	Metal-poor dwarf galaxies at Cosmic Noon in CECILIA	Ryan Trainor	Auditorium
2:45pm	<b>FLASH TALKS 1:</b> Matilde Mingozzi, Joseph Breneman, Julia Roman-Duval, Evangelina Shread		Auditorium
2:55pm	<ul style="list-style-type: none"> <li>Coffee Break + <b>Poster Session 1:</b> Evan Jennerjahn (Screen 1), Ayanah Canson (Screen 2), Christy Tremonti (Screen 3)</li> <li>Speaker Tech Check for Session 4 (Auditorium)</li> </ul>		
<b>Session 4, Chair: Janice Lee, Moderator: Macarena Garcia del Valle-Espinosa</b>			
3:25pm	High-Z	Emma Curtis-Lake	Auditorium
3:55pm	Tracing Early Metal Enrichment in the Era of Ever-Growing JWST Data	Yuki Isobe	Auditorium
4:10pm	Understanding the Chemical Enrichment of the early Universe with JWST EXCELS	Thomas Stanton	Auditorium
4:25pm	Future Observatories: Roman Space Telescope	Kristen McQuinn	Auditorium
4:35pm	Future Observatories: The Extremely Large Telescope (ELT)	Chris Evans	Auditorium
4:45pm	Future Observatories: The Habitable Worlds Observatory (HWO)	Jason Tumlinson	Auditorium
4:55pm	Discussion 1: Future Observatories	Jason Tumlinson, Kristy McQuinn, Chris Evans	Auditorium
5:30pm	<b>Welcome Reception (Café)</b>		

Shuttles will be available back to the host hotels.

Tuesday, May 12, 2026

Time	Title	Speaker	Location
8:15am	<ul style="list-style-type: none"> <li>Coffee and Snacks (Café)</li> <li>Speaker Tech Check for Session 5 (Auditorium)</li> </ul>		
<b>Session 5, Chair: Alex Crespo Gomez, Moderator: Jimena Rodriguez</b>			
9:00am	From Nearby Dusty Cradles to Distant Dawn: A tale of star clusters in evolving galaxies	Angela Adamo	Auditorium
9:30am	Low metallicities in clumpy galaxies at $z \sim 1$ : evidence for gas accretion in clump formation	Visal Sok	Auditorium
9:45am	The central role of stellar mergers in the census of metal-poor massive supergiants	Athira Menon	Auditorium
10:00am	Kinematics and Metallicity in Extremely Metal-Poor Tadpole Galaxies	Jyoti Yadav (V)	Auditorium
10:15am	<b>FLASH TALKS 2:</b> Michael Tucker, Zhihui Li, Jenna Cann		Auditorium
10:25am	<ul style="list-style-type: none"> <li>Coffee Break with <b>Poster Session 2:</b> D. Avery Kim (Screen 1), Sten Hasselquist (Screen 2), S. Jean Feeser (Screen 3)</li> <li>Speaker Tech Check for Session 6 (Auditorium)</li> </ul>		
<b>Session 6, Chair: Alex Crespo Gomez, Moderator: Jimena Rodriguez</b>			
10:55am	Ghost in the Cocoon: Unmasking the Dense Gas Shell Around a Little Red Dot	Vasily Kokorev	Auditorium
11:10am	Probing Massive Hot Stars in the Ultra Metal-Poor Blue Compact Dwarf Galaxy I Zw 18	Giacomo Bortolini	Auditorium
11:25am	Stochastically Sampling the IMF with Applications to Population III Candidates	Evan Jones	Auditorium
11:40am	Discussion 2: Low-Metallicity Environments	Angela Adamo, Aida Wofford, Emma Curtis-Lake	
12:05pm	<ul style="list-style-type: none"> <li>Lunch (Café)</li> <li>Speaker Tech Check for Session 7 (Auditorium)</li> </ul>		
<b>Session 7, Chair: Rebecca Larson, Moderator: Ananya Ganapathy</b>			
1:05pm	Lo metallicity no problems: the impact of small-scale ISM physics at low metallicities	Piyush Sharda	Auditorium
1:35pm	The TEMPOS Optical Survey of Metal-Poor Massive Stars in Nearby Galaxies	Christi Erba	Auditorium
1:50pm	Tracking sites of low-metallicity star formation with flexible galaxy models	Sahil Hegde	Auditorium
2:05pm	The Metal-Poor Frontier in Nearby Galaxies: Signatures of Ongoing Gas Accretion	Alejandro Olvera	Auditorium
2:20pm	Linking Metal-Poor Environments and Pop III Star Formation within a $z \sim 6$ Galaxy Overdensity	Zihao Li	Auditorium
2:35pm	Revealing metallicity-dependent binary formation in the Magellanic Clouds with DECam	Alexandra Masegian	Auditorium
2:50pm	<b>FLASH TALKS 3:</b> Kevin Martinez, Iker Millan, Sarah Doan, Sophia Ridolfo		Auditorium
3:00pm	<ul style="list-style-type: none"> <li>Coffee Break with <b>Poster Session 3:</b> Alejandro Crespo Gomez (Screen 1), Jimena Rodriguez (Screen 2), Logan Jones (Screen 3)</li> <li>Speaker Tech Check for Session 8 (Auditorium)</li> </ul>		
<b>Session 8, Chair: Svea Hernandez, Moderator: Ananya Ganapathy</b>			
3:30pm	The first ultra-metal-poor DLA	Sarah Bosman (V)	Auditorium
3:45pm	Rapidly Rotating Massive Stars at Low Metallicity	Sara Heap	Auditorium
4:00pm	The Faint-End of the Mass-Metallicity Relation at Cosmic Dawn	Tiger Hsiao	Auditorium
4:15pm	MEGATRON: The formation and environments of Population III stars at Cosmic Dawn	Anatole Storck	Auditorium
4:30pm	Star Formation in Pristine Environment: Metal-Poor Dwarfs in the Lynx-Cancer Void	Rakshit Chauhan	Auditorium
4:45pm	<b>FREE TIME</b> ( <i>Shuttles will be available back to the host hotels</i> )		
6:35pm	<b>BASEBALL GAME</b> ( <i>for those who pre-purchased tickets</i> )		

## Wednesday, May 13, 2026

Time	Title	Speaker	Location
8:15am	<ul style="list-style-type: none"> <li>Coffee and Snacks (Café)</li> <li>Speaker Tech Check for Session 9 (Auditorium)</li> </ul>		
<b>Session 9, Chair: Alberto Saldana-Lopez, Moderator: Oskar Arangure-Chong</b>			
9:00am	Feedback	Harley Katz	Auditorium
9:30am	Hydrodynamically Consistent Mass Loss and Spectra of Very Massive Stars	Jorick Vink (V)	Auditorium
9:45am	Low-metallicity galaxies at Cosmic Noon are more complicated than typical stellar models imply	Yijia Li	Auditorium
10:00am	Are high-EW LAEs good analogs for early galaxies - a study on the gas properties of LAEs at $2 < z < 6$	Lena Pless	Auditorium
10:15am	<b>FLASH TALKS 4:</b> Jiri Krticka, Federico Fogatini, Dian Triani, Junehyoung Jeon		Auditorium
10:25am	<ul style="list-style-type: none"> <li>Coffee Break with <b>Poster Session 4:</b> Abby Mintz (Screen 1), Rachel Beaton (Screen 2), Farhan Hasan (Screen 3)</li> <li>Speaker Tech Check for Session 10 (Auditorium)</li> </ul>		
<b>Session 10, Chair: Alberto Saldana-Lopez, Moderator: Oskar Arangure-Chong</b>			
10:55am	Unveiling the mysteries of WR stars at Low Metallicity: Insights from new spectroscopy from NGC 6822	Robin Trigg	Auditorium
11:10am	XTREM: a new statistical sample of local analogs to JWST reionization galaxies	Ricardo Amorin	Auditorium
11:25am	What Powers Extreme Emission Line Galaxies? Including X-ray Sources in Photoionization Models	Antara Basu-Zych	Auditorium
11:40am	Discussion 3: Feedback	Paul Crowther, Peter Senchyna, Harley Katz	
12:05pm	Group Photo (Leave your items in the auditorium, head outside to the front entrance stairs, head to lunch immediately after)		
12:10pm	<ul style="list-style-type: none"> <li>Lunch (Café)</li> <li>Speaker Tech Check for Session 11 (Auditorium)</li> </ul>		
<b>Session 11, Chair: Karla Arellano-Cordova</b>			
1:20pm	Hard Photons in a Metal-Poor Universe: the role of Massive Stars and binaries	Tomer Shenar	Auditorium
1:50pm	An Assessment Disfavoring the X-ray Binary Origin of Hell II Regions in Metal-Poor Star-forming Dwarfs	Ivan Altunin	Auditorium
2:05pm	Blueberry Galaxies Across the Spectrum: Extreme Local Analogs of High-z Galaxies	Konstantinos Kouroumpatzakis	Auditorium
2:20pm	The impact of mass eruptions on massive stellar populations	Daniel Pauli	Auditorium
2:35pm	Tracing the Hard Ionizing Continuum in Low-Metallicity EELGs from X-rays to the IR	Archana Aravindan	Auditorium
2:50pm	MXDFz4.4: low-metallicity, massive stars powering ionizing photon production and escape near the EoR	Ilias Goovaerts	Auditorium
3:05pm	<b>FLASH TALKS 5:</b> Ciaran Furey, Julia Alves, Charalampos Daoutis		Auditorium
3:15pm	<ul style="list-style-type: none"> <li>Coffee Break with <b>Poster Session 5:</b> Chris Richardson (Screen 1), Beth Sargent (Screen 2), David DePalma (Screen 3)</li> <li>Speaker Tech Check for Session 12 (Auditorium)</li> </ul>		
<b>Session 12, Chair: Grace Oliver</b>			
3:45pm	Probing the nearest, most iron-poor massive stars in the Magellanic Bridge	Elisa Schösser	Auditorium
4:00pm	Tracing Feedback in Low-metallicity Super Star Clusters	Sophia Flury	Auditorium
4:15pm	Refining low-metallicity binary population models: X-ray binaries and alpha-enhancement.	Jan Eldridge (V)	Auditorium
4:30pm	Linking CGM, ISM and escaping ionizing radiation in local analogs of distant galaxies	Alberto Saldana-Lopez	Auditorium
4:45pm	Mapping Ionizing Emission in Nearby Low-Metallicity Galaxies with MIRI/MRS	Kaelee Parker	Auditorium
5:00pm	How did Lyman Continuum Photons Escape from the First Galaxies?	Cody Carr	Auditorium
5:15pm	<b>Optional Event: SDAS (Snacks, Drinks, and Socializing), 5:15pm-6:30pm</b>		

Shuttles will be available back to the host hotels.

Thursday, May 14, 2026

Time	Title	Speaker	Location
8:15am	<ul style="list-style-type: none"> <li>Coffee and Snacks (Café)</li> <li>Speaker Tech Check for Session 13 (Auditorium)</li> </ul>		
<b>Session 13, Chair: Ryan Rickards Vaught, Moderator: Vital Fernandez</b>			
9:00am	Multi-element chemical abundance patterns, enrichment, evolution of high-redshift, low-metallicity galaxies in the JWST era	Ryan Sanders	Auditorium
9:30am	The Evolution of C/O Across Cosmic Epochs Using CLASSY and AURORA	Zorayda Martinez	Auditorium
9:45am	Physical conditions and chemical abundances in the circumgalactic medium around dwarf galaxies	Sean Johnson	Auditorium
10:00am	Consistent UV and Optical C/O Abundances Across Metallicity	Paige Kelly	Auditorium
10:15am	<b>FLASH TALKS 6:</b> Anjali Gupta, Madeline Lucey, Vicente Villanueva, Francisco Saez		Auditorium
10:25am	<ul style="list-style-type: none"> <li>Coffee Break with <b>Poster Session 6:</b> Marc Rafelski (Screen 1), Abigail Lee (Screen 2), Alba Vidal Garcia (Screen 3)</li> <li>Speaker Tech Check for Session 14 (Auditorium)</li> </ul>		
<b>Session 14, Chair: Ryan Rickards Vaught, Moderator: Vital Fernandez</b>			
10:55am	Tracking Down the Nitrogen in Metal-Poor Galaxies from the Local Universe to $z \sim 1.3$	Grace Olivier	Auditorium
11:10am	How Population III feedback impacts elemental enrichment in low-mass galaxies and at high redshift	Pratik J. Gandhi	Auditorium
11:25am	The Magellanic Clouds and Local Group Systems as Probes of Elemental Nucleosynthesis	Marco Palla (V)	Auditorium
11:40am	Discussion 4: Chemical Enrichment	Danielle Berg, Ryan Sanders, Chiaki Kobayashi	
12:05pm	<ul style="list-style-type: none"> <li>Lunch (Café)</li> <li>Speaker Tech Check for Session 15 (Auditorium)</li> </ul>		
<b>Session 15, Chair: Matilde Mingozi</b>			
1:20pm	Chemical Evolution	Chiaki Kobayashi	Auditorium
1:50pm	Beyond Case B and Uniform Temperatures: Systematic Biases in Nebular Diagnostics at Low Metallicity	Eduardo Mendez (V)	Auditorium
2:05pm	Metal-poor Massive Binaries and Binary Products In the Local Group	Maude Gull	Auditorium
2:20pm	The Evolution of Metal-Poor Dwarf Galaxies using JWST Spectroscopic Stellar Abundance Patterns	Katie Sharp	Auditorium
2:35pm	The Nature of Nitrogen Enhanced High Redshift Galaxies: AGN or Stars?	Peixin Zhu	Auditorium
2:50pm	Tracing the Chemical Evolution of Galaxies with CNO Abundances: New Constraints at $z > 6$	Karla Arellano-Cordova	Auditorium
3:05pm	<b>FLASH TALKS 7:</b> Eric Andersson, Nishant Mishra, Connor Painter, Ali Ahmad Khostovan		Auditorium
3:15pm	<ul style="list-style-type: none"> <li>Coffee Break with <b>Poster Session 7:</b> Ezra Sukay (Screen 1), Celia Mulcahey (Screen 2), ** (Screen 3)</li> <li>Speaker Tech Check for Session 16 (Auditorium)</li> </ul>		
<b>Session 16, Chair: Marc Rafelski</b>			
3:45pm	Reconciling Extremely Metal-Poor Galaxies Chemical Yields with Aspherical Massive Star Explosions	Shing Chi Leung	Auditorium
4:00pm	Searching for Signatures of Pop III Enrichment with Metal-poor High-z Damped Lyman-alpha Absorbers	Karthik Putha	Auditorium
4:15pm	Enrichment by the first stars in an ultra-faint dwarf galaxy	Ani Chiti	Auditorium
4:30pm	Metal enrichment in and around Galaxies during EoR: Insights from sub-parsec zoom-in simulations	Akanksha Kapahtia	Auditorium
4:45pm	Metallicity Estimates and Ionization Diagnostics in Local Analogs of High-z Galaxies.	Valentino Gonzalez	Auditorium
5:00pm	Discovery of the most metal-poor galaxies and direct N, O, Ne, S, Ar abundances of 50k DESI galaxies	Dirk Scholte	Auditorium
5:15pm	<b>FREE TIME</b> (Shuttles will be available back to the host hotels only)		
6:30pm	<b>Optional Event: Social Dinner at R. House 301 W. 29<sup>th</sup> Street Baltimore, MD 21211</b> (shuttle transportation not provided)		

## Friday, May 15, 2026

Time	Title	Speaker	Location
8:15am	<ul style="list-style-type: none"> <li>Coffee and Snacks (Café)</li> <li>Speaker Tech Check for Session 17 (Auditorium)</li> </ul>		
<b>Session 17, Chair: Farhan Hasan, Moderator: Macarena Garcia del Valle-Espinosa</b>			
9:00am	Seeking the first metals: key roles of supernovae on early metal enrichments in high-z galaxies	Yoshi Asada	Auditorium
9:15am	Massive, metal-poor star formation in the first billion years	James Trussler	Auditorium
9:30am	New Constraints on Supernova-Driven Outflows in Nearby Low-Mass Galaxies	Michael Romano	Auditorium
9:45am	A JWST-ALMA View of the Effects of Low Dust-to-Gas Ratio on the Physics of Photodissociation Regions	Illyse Clark	Auditorium
10:00am	JWST Captures the Growth of Aromatic Hydrocarbon Dust in the Extremely Metal-poor Galaxy Sextans A	Liz Tarantino	Auditorium
10:15am	Automatically Identifying Extremely Metal-Poor Galaxies Using Probabilistic Machine Learning	Julianna Levanti	Auditorium
10:30am	<ul style="list-style-type: none"> <li>Coffee Break (Café)</li> <li>Speaker Tech Check for Session 18 (Auditorium)</li> </ul>		
<b>Session 18, Chair: Farhan Hasan, Moderator: Macarena Garcia del Valle-Espinosa</b>			
11:00am	On the importance of the IGM/CGM enrichment in determining chemical abundances in the first 600 Myr	Annalisa Citro	Auditorium
11:15am	Quantifying the AGB dust production of nearby extremely metal-poor galaxies with JWST	Tom Henry	Auditorium
11:30am	Parsec-Scale ISM Structure and Dust Evolution at Low Metallicity	Christina Lindberg	Auditorium
11:45am	CLOSING REMARKS		
12:05pm	<ul style="list-style-type: none"> <li>Lunch (Café)</li> <li>Speaker Tech Check for Session 19 (Auditorium)</li> </ul>		
<b>Session 19</b>			
1:00pm	Modeling Tools/Future Proposals	SOC	Auditorium
1:15pm	<a href="#">PyStarburst99 Tutorial</a>	Calum Hawcroft	Auditorium
1:30pm	<a href="#">LiMe Tutorial</a>	Vital Fernandez	Auditorium
2:00pm	<b>SYMPOSIUM CONCLUDES</b>		

*Shuttles will be available back to the host hotels only (not airports, railway stations, etc)*