



# THE OFFICIAL PUBLICATION OF THE SALT LAKE ASTRONOMICAL SOCIETY

HOME OF SALT LAKE CITY, UTAH'S OBSERVATIONAL ASTRONOMERS AND ASTROPHOTOGRAPHERS



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## MOON PHASES

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Utah

JULY 2025



AUGUST 2025



# SLAS President Message



Hi everyone,

We have some very exciting news—our brand-new website has officially launched!

A huge thank you goes to Ken Warner, who has diligently managed our website for many years and dedicated countless hours; and now has led the development of this new site. We also want to recognize Jim Keane and Tony Sarra for their invaluable guidance and support throughout the process, along with others who contributed behind the scenes. This was a true team effort—thank you all!

We are now in the heart of star party season. While the skies haven't always cooperated, we've already enjoyed some fantastic evenings at the Stansbury Park Observing Complex (SPOC), at various libraries, Winchester Park for solar parties, and at special events hosted by local organizations. These events have been a great success, drawing large public turnouts and even welcoming new members into our community.

If you haven't participated yet, now is the perfect time to get involved! You can: Volunteer as an assistant, take training to become a telescope operator, or bring your gear and share your passion with the public.

It's also a wonderful opportunity to meet other members, check out different equipment, and get tips for your setup.

We're also expanding our outreach efforts. Members have appeared on TV and radio, staffed info and NASA Night Sky Network tables at events, strengthened partnerships with other clubs, and begun conversations with local organizations. There's more to come on these exciting developments.

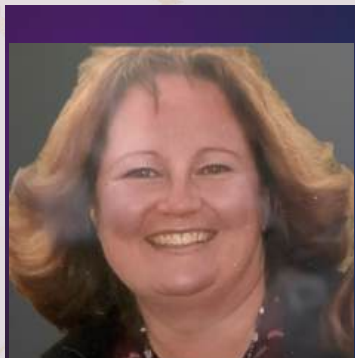
Finally, a special thanks to Lowell Lyon and several dedicated members who are playing a key role in organizing AstroCon 2025, hosted by the Astronomical League and taking place at Bryce Canyon. I hope to see many of you there—it's going to be a fantastic event.

Thank you all for making this society such a vibrant, welcoming, and inspiring community. Clear skies and happy observing!

Trevor



# Constitutional Amendment Process – A Letter from the Vice President and Nova Newsletter Editor



Jenette Scott

## **\*🔔 Editor's Note – Proposal Withdrawn After Publication**

The proposed amendments to the SLAS Constitution, shown below, were submitted for publication prior to their formal withdrawal. After thoughtful consideration and feedback from members, the submitting member, SLAS President Trevor Hebditch, requested that the proposal be withdrawn before any vote or final action. The SLAS Board supported this request.

As a result, these amendments are no longer under consideration, and no vote will take place. They are included here only for transparency, as the withdrawal occurred after publication had been finalized.

Dear SLAS Members,

In light of the proposed amendments to the SLAS Constitution, I'd like to clarify a few points and assure you that the current constitutional amendment process is being handled in full accordance with both the SLAS Constitution and Robert's Rules of Order.

### **Member-Led and Constitutionally Sound**

First and foremost, this is a member-led process. As outlined in Article VIII.A of the SLAS Constitution, "Any member may propose amendment(s) and/or bylaws." In this case, a proposed amendment was submitted by a member, our President. To avoid any conflict of interest, he has recused himself entirely from the amendment process. In that light, I have stepped in as Vice President to facilitate the process, not to direct or decide it.

### **Why the Vice President?**

According to Article IV.C.2.c, the Vice President is responsible for "publicity and public relations." With the President rightfully recused as some of the amendments were proposed by him, it falls within my duties to ensure the membership is kept informed in a transparent, timely, and inclusive manner. This role does not grant unilateral authority, but it does obligate me to support a fair and open process as clearly defined in our governing documents.

### **Addressing Key Questions**

#### **Was the Board Involved?**

Yes. Proposed amendments were shared and discussed. However, Board approval is not required to propose amendments. According to Article VIII, the authority to amend the Constitution lies with you, the members. This is why they are being presented to you in this edition of the Nova Newsletter to give you time to read and consider them before

the general meeting in July, where they will be discussed.

No clause in the SLAS Constitution requires the Board to approve proposed amendments before they are presented to the membership. This ensures that amendments remain member-led and democratic in nature.

To ensure fairness, we are also adhering to Robert's Rules of Order, Article VIII – Bylaws and Amendment Procedures, which recommend:

**“The process of amending bylaws should be conducted with advance notice, opportunity for discussion, and a two-thirds vote of those present or voting.”**

This is exactly the process we are following.

#### **The Step-by-Step Amendment Process**

We are following Article VIII.B of the Constitution precisely:

- The proposed amendments are published in this issue of the Nova. This is an official notice of discussion at the July general meeting. Please read and consider each point carefully.
- Pros and cons will be accepted via email to me through July 30 and published in a special edition of the Nova Newsletter on August 1, so that members can read them before the August general meeting.
- A vote will be held at the August general meeting, with both in-person and absentee ballots, as outlined in Article VIII.B.4 and VIII.B.3.c.

#### **Ensuring Election Integrity**

To ensure neutrality, a voting committee will be selected through a “drawing names out of a hat” method. Volunteers who are current SLAS members will be asked to sign up, and the committee will be drawn from those who are not on the Board and have not taken a position on the proposed amendments. This approach upholds the spirit of both Robert's Rules of Order and Article V.B.4, ensuring impartiality and credibility in the voting process.

#### **Financial Considerations**

The Board has evaluated the financial implications of proposed changes, including the addition of a new membership class. No action will be taken without adequate opportunity for member input at the July general meeting.

#### **Setting Expectations for Civil Dialogue**

We welcome healthy debate and diverse opinions—this is how strong decisions are made. But as your Vice President, I want to be clear: bullying, intimidation, and personal attacks have no place in this process or our society.

As outlined in Robert's Rules of Order, Section 61 (Disorderly Words or Acts), all participants are expected to maintain a standard of decorum and mutual respect. This applies equally to Board members and general members. A member who violates decorum and refuses to comply after warnings can be removed from the meeting if the majority of the members present vote to do so.

Please remember, we are all volunteers, none of us is perfect, and there will be mistakes. Please remember to extend grace, tolerance, and respect. We are united not only by a love of astronomy but by a shared commitment to collaborative, respectful governance. We want SLAS to be a place where everyone feels welcome to participate and contribute. Please respect each other's right as members to express concerns.

I am confident that if we follow the constitution and Robert's Rules, we will land in a place that reflects the collective wisdom of our members and is a fun place to be.

#### **A Society Worth Building Together**

Every member has a voice, and your voice matters. If we follow our Constitution and respect the procedures outlined in Robert's Rules, we will arrive at decisions that reflect the wisdom, diversity, and values of our society.

Thank you for your ongoing participation and for helping keep SLAS the inspiring, welcoming organization we all value.  
Jenette

# SLAS OFFICERS

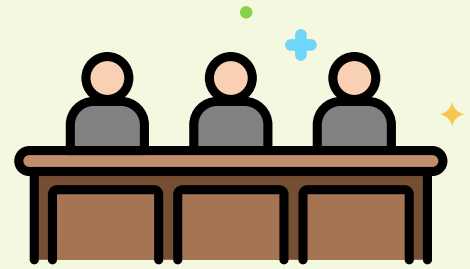
## SLAS Board of Directors

President: Trevor Hebditch

Vice President: Jenette Scott

Secretary/Treasurer: Rachel Henderson

Board Members at Large: Hayden Wilde and Brad DeDea



## Appointed Positions

Astronomical League Contact: Aleta Cox

Equipment Manager: Trevor Hebditch and Aleta Cox

Library Loaner Telescope Coordinator: Joan Carman

Historian: Patrick Wiggins

NASA Night Sky Network Coordinators: Krista Lemoine and Jenette Scott

IDA - Utah Chapter Advocate: Jenette Scott

Nova Newsletter Editor: Jenette Scott

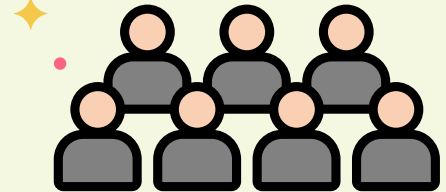
Observatory Director: Jim Keane

Private Star Party Coordinator: Hayden Wilde

Solar Party Coordinator: Don Abernathy

Webmaster: Ken Warner

ZAP Grant Writer: Jim Keane



Chair: Jim Keane

Members: Trevor Hebditch, Bob Moore, Patrick Wiggins, Jim Keane, John Drabik, Leslie Fowler, Bill Kennedy.

Members As Obser. Dir. Emeritus: Rodger Fry.

## SPOC Advisory Committee



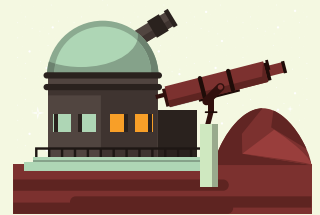
## SPOC Telescope Instruction Coordinators

Bogdan Refractor: Marlene Egger

Ealing: Jim Keane

Grim: Rodger Fry

Clements: Leslie Fowler



[Click Here To Contact Us](#)



# SLAS EVENTS PAGE

## star party and sun party



Come to a  
Star Party!!

[www.slas.us](http://www.slas.us)



The Salt Lake Astronomical Society invites you to join us at a FREE public Star Party or Sun Party! Enjoy views of the Sun, Moon, Planets, Stars, Nebulae, and Galaxies through some of Utah's largest telescopes.

### 2025 Star & Sun Party Schedule & Locations

APR	4	SL Co. Library Branch <b>Sandy Library</b> 10100 S. Petunia Way (1405 East) Sandy, UT
APR	5	SPOC*
APR	12	Sun Party- Winchester Park (6400 S. 1100 West)
APR	19	SPOC*
MAY	2	SL Co. Library Branch <b>Taylorville Library</b> 4870 S. 2700 West, Taylorville, UT
MAY	3	SPOC*
MAY	10	Sun Party- Winchester Park (6400 S. 1100 West)
MAY	17	SPOC*
MAY	30	SL Co. Library Branch <b>Magna Library</b> 2675 S. 8950 West, Magna, UT
MAY	31	SPOC*
JUN	14	Sun Party- Winchester Park (6400 S. 1100 West)
JUN	21	SPOC*
JUN	25-28	Bryce Canyon Astronomy Festival, also Astron. League ASTROCON 2025 @ Bryce Canyon N. P.
JUL	12	Sun Party- Winchester Park (6400 S. 1100 West)
JUL	19	SPOC*
AUG	1	SL Co. Library Branch <b>Herriman Library</b> 5380 W. Main Street, Herriman, UT
AUG	2	SPOC*
AUG	9	Sun Party- Winchester Park (6400 S. 1100 West)
AUG	16	SPOC* Stansbury Days
AUG	29	SL Co. Library Branch <b>Holladay Library</b> 2150 E. Murray-Holladay Blvd., Holladay, UT
AUG	30	SPOC*
SEP	6	Sun Party- Winchester Park (6400 S. 1100 West)
SEP	13	SPOC*
SEP	18-20	Great Basin Astronomy Fest, and Heritage Star Festival @ Capitol Reef N.P.
SEP	26	SL Co. Library Branch <b>Granite Library</b> 3331 S. 500 East, South Salt Lake City, UT
SEP	27	SPOC*
OCT	4	Sun Party- Winchester Park (6400 S. 1100 West)
OCT	11	SPOC*
OCT	25	SPOC* (final star party of the year)

\*Stansbury Park Observatory Complex



Star Parties run from Dusk until:  
10 PM in Apr, May, Sept, Oct  
11 PM in Jun, Jul, Aug,  
Sun Parties are from 9AM – Noon.

**All Sun & Star Parties are Weather Permitting.**  
See you under a clear Sky



## General Meeting Information

Board Meetings are for SLAS Board members and are open to any member of SLAS to attend. Please note that only board members may vote at board meetings. Board meetings take place on the 2nd Wednesday of each month at 7:00 pm located at the Denny's Restaurant on 1701 West North Temple Street Salt Lake City, Utah 84116 (We meet in the back meeting room)

General Meetings for SLAS members take place on the 3rd Wednesday of each month (Except for December when the solstice party at the beginning of December takes the place of the General Meeting ) at 7:30 pm located at Room TB104, Rampton Technology Building, Salt Lake Community College Redwood Road Campus Parking is across the street to the north of the building in parking lot 'R'. General Meetings are open to the public.

- July 09 -Board Meeting
- July 16 -General Meeting
- Aug. 13 -Board Meeting
- Aug. 20 -General Meeting

Please read the information above for the place and time of meetings and the webpage [slas.us](http://slas.us).



**CONSTITUTION CHANGE NOTICE ANNOUNCED AT JUNE 11, 2025 BOARD MEETING-TO BE ANNOUNCED AT JUNE 18, 2025 GENERAL MEETING**

**important**

**The SLAS Constitution as It Currently Stands**

**Constitution of the Salt Lake Astronomical Society**

**Preamble**

We the undersigned, desiring to secure the pleasures and benefits of an association of persons interested in astronomy; to promote the science of astronomy and its associated sciences; to encourage and coordinate activities with professional research, do hereby organize and constitute ourselves as the Salt Lake Astronomical Society, a non-profit organization.

**Article I Name**

The name of this organization shall be the Salt Lake Astronomical Society, hereafter referred to as "the Society".

**Article II Membership**

A. Any person and/or family with an interest in astronomy shall be admitted to membership upon the payment of membership dues.

B. A membership is a person or a family that has paid membership dues. Individual family members have membership privileges but the entire family shall comprise one membership (hereinafter called a "membership").

**Article III Meetings**

A. Regularly scheduled general meeting will be held at least monthly as scheduled by the Board. Times and locations of at least the next three general meetings will be published in each edition of the Society's journal.

B. Regular meetings of the Board of Directors shall be held at least quarterly. The time and place of regular meetings of the Board of Directors shall be published in the Society's journal in advance of the meeting.

C. Special meetings of the Board may be called by the Chairman of the Board as required. No meeting of the Board of Directors may be held without all Board members having been given proper notice.

D. Minutes of all meetings of the Board of Directors will be published in the following edition of the Society's journal and read at the following general meeting.

E. Any decision of the Board may be suspended by a 2/3 vote of the memberships present at the general meeting following publication of the minutes. Suspended decisions shall be submitted to the entire membership for final disposition.

**Article IV Officers**

A. The Board of Directors shall consist of the following five officers (hereinafter called "the Board"):

1. President/Chairman of the Board
2. Vice-President
3. Secretary/Treasurer
4. Board Member
5. Board Member

B. Terms of office shall be one year beginning the first of January following the general election of officers and ending the 31st of December of the same year. No member may serve on the Board for more than two out of any three consecutive years. Board vacancies shall be filled within 30 days by the remaining Board.

### C. Duties of Officers:

1. President/Chairman of the Board
  - a. Administers the affairs of the Society
  - b. Presides at meetings.
  - c. Responsible for meeting content.
  - d. Responsible for all the assets of the Society.
2. Vice-President
  - a. Assumes duties of the President/Chairman in his/her absence.
  - b. Becomes President/Chairman in the event that office becomes vacant.
  - c. Responsible for publicity and public relations.
3. Secretary/Treasurer
  - a. The Secretary/Treasurer is responsible for all the books and records of the Society.
4. Board Members
  - a. Advisors to the Board
  - b. May accept duties and responsibilities as agreed upon by the Board.

## Article V Elections and Voting Procedures

### A. Eligibility

1. Persons wishing to run for and hold office in the Society must:
  - a. Be a member of the Society and maintain membership status throughout their term of office; and
  - b. Be at least 18 years of age.
2. No more than one person per membership may run for office for any given term.
3. No more than one person per membership may serve on the Board during any given term.

### B. The Election Process:

1. Members wishing to run for office shall file their candidacy with the Secretary during August.
2. All candidates will be announced to all members by email during the first week of September and at the September general meeting.
3. If necessary, primary elections will be held during the September general meeting by the memberships present for the purpose of narrowing the number of candidates to two for each office.
4. An election committee comprised of three non-candidate members shall be appointed by the President during the September meeting.
5. Final candidates shall be announced in the September issue of the Society's journal and be given 1/4 page therein to make a statement.
6. Absentee ballots will be included with the September issue of the Society's journal.
7. All memberships of record as of the previous 1st of September will be eligible to vote in a general election.
8. A general Election by secret ballot will be held online beginning after the September general meeting and running until midnight on the day before the October general meeting. Members may vote on the SLAS website. For those who wish, paper ballots shall be made available at the beginning of the October general meeting. The election committee shall determine when the paper ballot voting closes. They shall then determine the results, which shall be announced before the end of the October general meeting. All members shall be sent an email announcing the election results after the October general meeting.



C. Voting:

1. There shall be one vote per membership.
2. Proxies shall not be accepted for any purpose.
3. Motions will carry with a simple majority of those memberships present at a regularly scheduled meeting unless otherwise specified.

**Article VI Finances**

- A. Annual memberships dues shall be as recommended by the Board of Directors and ratified by a 2/3 majority of those memberships present at a regularly scheduled general meeting. All memberships shall pay the same dues.
- B. The Board is authorized to make all contracted magazine subscription expenditures.
- C. The Board shall prepare a budget for their term of office, to be presented for approval at the January general meeting and to be published in the journal prior to the meeting.
- D. The budget will be adopted upon approval of the memberships present.
- E. The Board is authorized to disburse the budget as approved.
- F. All non budgeted funds shall be kept in a general fund which the Board is authorized to spend in a prudent manner so long as no item exceeds an amount to be approved in the January meeting. Items exceeding the approved amount shall be submitted for approval at a general meeting.
- G. Two Board member's signatures are required on all Society checks.

**Article VII Removal of Board Members**

- A. Any member of the Board may be removed from the Board by a 2/3 majority vote of the memberships present at any regularly scheduled general meeting.

**Article VIII Constitutional Amendments and Bylaws**

- A. Any member may propose amendment(s) and/or bylaws.
- B. The amendment and adoption process shall be:
1. The proposed amendment(s) and/or bylaw(s), hereinafter called "amendment", shall be published in the journal along with notice that the proposed amendment will be discussed at the next general meeting.
  2. The proposed amendment shall be discussed at the next general meeting.
  3. The following journal will include:
    - a. The pros and cons concerning the proposed amendment written by advocates on each side.
    - b. Notification that a vote on the proposed amendment will take place at the next general meeting.
    - c. Absentee ballots for the amendment.
  4. The proposed amendment will be voted on during the next general meeting by the memberships present and absentee ballots.
  5. The proposed amendment will be adopted if 2/3 of the votes cast favor adoption.

**Article IX General Procedures**

- A. On procedural matters not covered by this constitution, Roberts Rules of Order will be followed.
- B. The Society is and shall remain a nonprofit corporation under the laws of the State of Utah and shall be subject to all nonprofit corporate laws of said state.

## **Article X Political Activity**

The Society is organized as an educational and scientific organization and will take part only in activities that are scientific/ educational in nature. No substantial part of the activities of the Society shall be carrying on of propaganda or otherwise attempting to influence legislation and the Society shall not participate in or intervene in (including the publishing or distribution of statements) any political campaign on behalf on any candidate for public office. Notwithstanding any other provisions of these articles, the Society shall not carry on any other activities not permitted to be carried on by a corporation exempt from Federal Income Tax under section 501 (c) (3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law).

## **Article XI Dissolution of the Society**

Upon the dissolution of the Society, the Board shall, after paying or making provisions for payment of all the liabilities of the Society, dispose of all of the assets of the Society exclusively for the purpose of the Society in such manner, or to such organization or organizations organized and operated exclusively for charitable, educational, religious or scientific purposes as shall at the time qualify as an exempt organization or organizations under section 501 (c) (3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law), as the Board shall determine. Any of such asset not so disposed of shall be disposed of by the Court of Common Pleas in the county in which the principle office of the Society is then located, exclusively for such purposed or to such organization or organizations, as said court shall determine, which are organized and operated exclusively for such purposes.

## **Article XII Enactment**

Upon ratification of this constitution by at least 2/3 of the eligible voters of the Society, this constitution shall be adopted as the constitution of the Salt Lake Astronomical Society and all previously adopted constitutions and bylaws shall become null and void. The existing Board of Directors shall remain intact and the governing body of the Society until the first elections under this constitution are held.

Constitution Ratified 16 June 1980; revised 8 21 2019.

Electronically signed: John R. Johansen, SLAS President, October 9, 2019

### **\*🔔 Editor's Note – Proposal Withdrawn After Publication**

The proposed amendments to the SLAS Constitution, shown below, were submitted for publication prior to their formal withdrawal. After thoughtful consideration and feedback from members, the submitting member, SLAS President Trevor Hebditch, requested that the proposal be withdrawn before any vote or final action. The SLAS Board supported this request.

As a result, these amendments are no longer under consideration, and no vote will take place. They are included here only for transparency, as the withdrawal occurred after publication had been finalized.

# Proposed Changes

## \*🔥 Editor's Note – Proposal Withdrawn After Publication

The proposed amendments to the SLAS Constitution, shown below, were submitted for publication prior to their formal withdrawal. After thoughtful consideration and feedback from members, the submitting member, SLAS President Trevor Hebditch, requested that the proposal be withdrawn before any vote or final action. The SLAS Board supported this request.

As a result, these amendments are no longer under consideration, and no vote will take place. They are included here only for transparency, as the withdrawal occurred after publication had been finalized.

## Proposed Constitution Changes Notice

1. (see addendum below) Will be posted in Newsletter, announced at this meeting, the general meeting and a SLASBlast for a member discussion and vote at the July General meeting as per the constitution Article VIII Constitutional Amendments and Bylaws

## b. Other/Missed Items

**Addendum - Article VIII Constitutional Amendments and Bylaws A. Any member may propose amendment(s) and/or bylaws.**

### Article VIII Constitutional Amendments and Bylaws

A. Any member may propose amendment(s) and/or bylaws.

B. The amendment and adoption process shall be:

1. The proposed amendment(s) and/or bylaw(s), hereinafter called "amendment", shall be published in the journal along with notice that the proposed amendment will be discussed at the next general meeting.
2. The proposed amendment shall be discussed at the next general meeting.
3. The following journal will include:
  - a. The pros and cons concerning the proposed amendment written by advocates on each side.
  - b. Notification that a vote on the proposed amendment will take place at the next general meeting.
  - c. Absentee ballots for the amendment.
4. The proposed amendment will be voted on during the next general meeting by the memberships present and absentee ballots.
5. The proposed amendment will be adopted if 2/3 of the votes cast favor adoption.

## Change 1 Vote

**Change Article IV Officers - B.** Terms of office shall be one year beginning the first of January following the general election of officers and ending the 31st of December of the same year. No member may serve on the Board for more than two out of any three consecutive years. Board vacancies shall be filled within 30 days by the remaining Board.

**Change Article IV Officers - B.** Terms of office shall be one year beginning the first of January following the general election of officers and ending the 31st of December of the same year. No member may serve on the Board for more than two out of any three consecutive years, **unless an extension is approved as per Article V Elections and Voting Procedures - A. Eligibility - part 4.** Board vacancies shall be filled within 30 days by the remaining Board.

## Add to Article V Elections and Voting Procedures - A. Eligibility - Part 4:

- 4) A board member, who has already served 2 years on the board, can be re-elected for an additional year if the following process is followed:
  - a) A board member, who is not related, proposes the extension at the August board meeting.
  - b) The remaining board members support the motion to allow for the extension at the August board meeting and the motion is announced at the August general meeting.
  - c) Four (4) additional current members, who are also not related to any board member, and in good standing, support the motion via a written notification to the board.
  - d) The existing board member can then submit their name for the same position they currently hold and the normal constitutional election process is followed.

## Add to Article II Membership - Parts C and D:

## Change 2 Vote

**Add a new class of membership as part C - An Associate Member (non-voting):** Reserved for teachers or professionals that provide STEM/astronomy education/programs in approved educational organizations/facilities. They would not pay dues, thus have no voting rights, but would receive the newsletter, SLASBlasts, etc. They must pay the SPOC fees if they wish to use the facilities and have followed the training SLAS requires.

## Change 3 Vote

**Add a new class of membership as part D - A Honorary Member:** Reserve for members who have been in the society for more than 10 years and have been recognized by the board and received an achievement award. To vote they would need



to pay the normal fee, otherwise just have the same rights as normal members. They must pay the SPOC fees if they wish to use the facilities and have followed the training SLAS requires.

**Change 4 Vote - Dependant and would need to be modified appropriately depending on change 2 and/or 3 being approved**

**Change to Article VI Finances - A.** Annual memberships dues shall be as recommended by the Board of Directors and ratified by a 2/3 majority of those memberships present at a regularly scheduled general meeting. All memberships shall pay the same dues.

to

**Change to Article VI Finances - A.** Annual **membership** dues shall be as recommended by the Board of Directors and ratified by a 2/3 majority of those memberships present at a regularly scheduled general meeting.

- a. **All regular members shall pay the same dues.**
- b. **Associate members do not pay a membership fee.**
- c. **Honorary members do not pay a membership fee unless they wish to vote.**

## Summary of Proposed Changes to SLAS Constitution

### ✓ Change 1 – Board Term Limits and Re-election Exception

**Current Rule:** No member may serve on the Board more than 2 out of 3 consecutive years.

**Proposed Change:** Allows a third consecutive year if:

Another (non-related) board member proposes the extension at the August board meeting.

The Board supports it and announces the motion at the August general meeting.

Four additional (non-related) members support it in writing.

Then the person can run again, following normal election procedures.

**Purpose:** Adds flexibility for continuity in leadership if a strong candidate wishes to continue.

### ✓ Change 2 – Associate Membership

**New Category:** Non-voting Associate Member for educators providing STEM/astronomy programs.

**Dues:** None (must pay SPOC fees).

**Benefits:** Access to newsletter and SLASBlasts; no voting rights.

**Eligibility:** Approved professionals/teachers in educational institutions.

**Purpose:** Encourages outreach and educational collaboration without diluting voting control.

### ✓ Change 3 – Honorary Membership

**New Category:** Honorary Member for long-standing members (10+ years) awarded by the Board.

**Dues:** None unless voting rights are desired.

**Benefits:** All regular privileges minus voting, unless dues are paid.

**Purpose:** Honors commitment while preserving the member-funded model and optional voting.

### ✓ Change 4 – Membership Dues Clarification

**Current Wording:** All memberships pay the same dues.

**Proposed Update:** Regular members pay dues; Associate and Honorary members are exempt unless voting.

**Purpose:** Aligns financial rules with new membership categories.

## Comparison of Current vs Proposed SLAS Constitution Language

Article/Section	Current Language	Proposed Change
Article IV – Officers, Section B Board Terms	No member may serve on the Board for more than two out of any three consecutive years.	No member may serve on the Board for more than two out of any three consecutive years, unless an extension is approved as per Article V Elections and Voting Procedures – A. Eligibility – part 4.
Article V – A. Eligibility (New Part 4)	No provision for extending Board service beyond 2 years in 3.	Adds a process to allow a board member to serve a 3rd consecutive year if: a) Motion made by unrelated board member at August board meeting b) Board approves and announces at August general meeting c) 4 unrelated, current members support in writing d) Candidate may run again via standard process
Article II – Membership, Part C	No Associate Membership class exists.	Adds Associate Member: - Non-voting - Reserved for educators in approved organizations - No dues - Receives newsletter & SLASBlasts - Pays SPOC fees if using facilities
Article II – Membership, Part D	No Honorary Membership class exists.	Adds Honorary Member: - Non-voting unless dues paid - For 10+ year members recognized with achievement award - Pays SPOC fees if using facilities
Article VI – Finances, Section A	All memberships shall pay the same dues.	Revised to: a) Regular members pay same dues b) Associate members do not pay dues c) Honorary members do not pay unless they wish to vote
Article VIII – Amendments	Fully written process already exists.	No language change proposed; appears reprinted for visibility/context

# 2025 Celestial Calendar

## January

SUN	MON	TUES	WED	THUR	FRI	SAT
			01	02		
05	06	07	08	09		11
12				16	17	
19	20	21	22	23	24	25
26	27	28				

## April

				03	04	
06	07	08	09	10		12
	14	15	16	17	18	19
20			23			26
		29				

## July

		01	02	03	04	05
06	07	08	09		11	12
13	14	15		17	18	19
	21	22	23		25	26
27			29	30	31	

## October

			01	02	03	04
		07	08		10	11
12		14	15	16	17	18
19	20		22	23	24	25
26	27	28	29	30	31	

## February

SUN	MON	TUES	WED	THUR	FRI	SAT
02	03	04	05		07	08
	10	11		13	14	15
	17	18	19	20	21	22
23	24	25	26	27		

## May

				01	02	
04			07	08	09	10
11		13	14	15	16	17
18	19	20	21			24
25	26		28	29	30	

## August

					01	02
03	04	05	06	07	08	
10			13	14	15	
17	18		20	21	22	
24	25	26	27	28	29	30

## November

						01
	03	04			07	08
	10	11		13	14	15
16		18	19			22
23	24	25	26	27	28	

## March

SUN	MON	TUES	WED	THUR	FRI	SAT
02	03	04		06	07	
09	10	11	12	13		15
16	17	18	19		21	22
	24	25	26	27	28	

## June

	02	03	04	05	06	07
08	09	10		12	13	14
15	16	17		19	20	
	23	24		26	27	28
	30					

## September

	01	02	03	04	05	06
		09	10	11		13
14	15		17	18	19	
		24	25	26	27	
28	29	30				

## December

	01	02			05	06
	08	09	10	11	12	
14	15	16	17	18		20
		23	24	25		27
28	29	30				

### Icon Key

- New Moon
- Full Moon
- Supermoon
- Mercury Greatest Elongation
- Venus Greatest Elongation
- Mars
- Saturn Opposition
- Jupiter Opposition
- Neptune Opposition
- Uranus Opposition
- Pleiades Cluster
- Solar Maximum

### Lunar Eclipses

**Mar 13** Total Lunar Eclipse  
(visible from Americas, Antarctica, Alaska, Russia and Africa)

**Sep 07** Total Lunar Eclipse  
(visible from Americas, Antarctica, Alaska, Russia and Africa)

### Partial Solar Eclipses

**Mar 29** Partial Solar Eclipse  
(visible from the Americas, western Russia, Europe and Africa)

**Sep 21** Partial Solar Eclipse  
(visible from Antarctica and Oceania)

### Saturn's Plane Crossing

**Mar 23 - April 11**  
Saturn's rings cross plane on March 23, but the planet becomes visible in the morning sky by April 11.

### Lunar Occultation

**Jan 13** Mars  
**Jun 29** Mars

### Meteor Showers

**Jan 03-04** Quadrantids  
**Apr 22-23** Lyrids  
**May 06-07** Eta Aquarids  
**Jul 28-29** Delta Aquarids  
**Aug 12-13** Perseids  
**Oct 08-09** Draconids  
**Oct 21-22** Orionids  
**Nov 12-13** Taurids  
**Nov 17-18** Leonids  
**Dec 13-14** Geminids  
**Dec 21-22** Ursids

### Equinoxes & Solstices

**Mar 20** March Equinox  
**Jun 21** June Solstice  
**Sep 22** September Equinox  
**Dec 21** December Solstice

### Conjunctions

**Jan 03** Venus and Moon  
**Jan 04** Saturn and Moon  
**Jan 10** M45 and Moon  
**Jan 13** Mars and Moon  
**Jan 14** M44 and Moon  
**Jan 18** Venus and Saturn  
**Jan 31** Saturn and Moon  
**Feb 01** Venus and Moon  
**Feb 06** M45 and Moon  
**Feb 06** Jupiter and Moon  
**Feb 09** Mars and Moon  
**Mar 01** Venus and Moon  
**Mar 05** M45 and Moon  
**Mar 08** Mars and Moon  
**Apr 01** M45 and Moon  
**Apr 02** Jupiter and Moon  
**Apr 05** Mars and Moon

**Apr 24** Venus, Saturn and Moon  
**Apr 28** Venus and Saturn  
**Apr 30** Jupiter and Moon  
**May 03** Mars and Moon  
**May 05** M44 and Mars  
**May 22** Saturn and Moon  
**May 23** Venus and Moon  
**Jun 01** Mars and Moon  
**Jun 18** Saturn and Moon  
**Jun 22** Venus and Moon  
**Jun 29** Mars and Moon  
**Jul 16** Saturn, Pluto and Moon  
**Jul 20** M45 and Moon  
**Jul 28** Mars and Moon  
**Aug 11** Venus and Jupiter  
**Aug 12** Saturn and Moon

**Aug 16** M45 and Moon  
**Aug 31** M44 and Venus  
**Sep 08** Saturn, Neptune and Moon  
**Sep 12** M45 and Moon  
**Sep 16** Jupiter and Moon  
**Oct 05** Saturn and Moon  
**Oct 09** M45 and Moon  
**Oct 13** Jupiter and Moon  
**Nov 02** Saturn and Moon  
**Nov 06** M45 and Moon  
**Nov 09** Jupiter and Moon  
**Nov 29** Saturn and Moon  
**Dec 03** M45 and Moon  
**Dec 07** Jupiter and Moon  
**Dec 26** Saturn and Moon  
**Dec 31** M45 and Moon



# **SAY HELLO TO OUR NEW MEMBERS!**

Jeremy Davis

Mark Gottlieb

John Hayes

Brooklyn Little

Eric Openshaw

Jeremy Scott

WELCOME  
ABOARD!

**At SLAS, we are observational astronomers who:**

**\*Promote astronomy\***

**\*Encourage public education and interest\***

**\*Coordinate activities with professional research\***



# SLAS General Meeting Guest Speakers

## July 16, 2025      **Topic: The World of Art in Science**



Photo Credit: Westminster U

Dr. Julia Kamenetzky is an Associate Professor of Physics at Westminster University in Salt Lake City, Utah (formerly Westminster College). Before joining Westminster, she was an NSF Astronomy & Astrophysics Postdoctoral Fellow at the University of Arizona.

She earned her MS and PhD in Astrophysical and Planetary Sciences from the University of Colorado Boulder and her BA in Physics from Cornell College in her home state of Iowa.

Dr. Kamenetzky's research has focused on molecular gas in star-forming galaxies, using instruments such as the Herschel SPIRE Fourier Transform Spectrometer, ALMA, and the Arizona Radio Observatory.

At Westminster, she mentors undergraduate students in a wide range of research projects, including light pollution, variable star and exoplanet transit monitoring, and physics and astronomy education research. She also participated in the 2017 Citizen CATE and 2024 DEB Initiative eclipse projects to image the solar corona.

Passionate about inclusive STEM education, Dr. Kamenetzky is committed to advancing participation from underrepresented groups in science. In her classroom, she uses research-supported active-learning strategies and standards-based grading to help students connect science with society and reach their full potential.

## August 20, 2025

### **Topic: Tonga Volcano and Its Effects On the Ionosphere** **Dr. Mary Lou West**



Photo Credit: Montclair State U

Dr. Mary Lou West earned both her BA and MS degrees from Cornell University and went on to receive her Ph.D. from Columbia University. She is now a Professor Emerita of Mathematical Sciences at Montclair State University. Throughout her career, she has delved into a wide range of subjects, including medieval astronomy, the composition and structure of meteorites, cosmic rays, galactic formation, and science education. A passionate and engaging teacher, Dr. West has mentored countless students on topics ranging from astronomy to computer simulations of physical systems. She continues to stay active in the North Jersey Astronomical Group, the New Jersey chapter of the American Association of Physics Teachers, and the American Astronomical Society. Her published research covers a diverse range of scientific topics, including the atmospheric systems of the American continent, gravity waves, periodic disturbances, thermospheric behavior, traveling ionospheric disturbances (TIDs), and wireless signal fluctuations, often focusing on subtle phenomena such as slight enhancements and wave period variations.



# **Congratulations to Marlene Egger – SLAS** **Lifetime Achievement Award Nominee!**



Photo Credit: Marlene Egger (Facebook)

We are thrilled to announce that Marlene Egger has been nominated for the Salt Lake Astronomical Society's Lifetime Achievement Award!

Marlene has been a dedicated and knowledgeable member of SLAS for many years, with a special talent for teaching others about the night sky, particularly the constellations. Her passion for astronomy and her willingness to share that knowledge has made a lasting impact on our club and its members.

She has also been instrumental in training members on the use of the Bogden 200mm refractor telescope, helping ensure this remarkable instrument is accessible to all who want to explore the cosmos.

Marlene's generous spirit, deep experience, and ongoing contributions embody the heart of SLAS. Please join us in congratulating her on this well-deserved recognition!

If you would like to nominate a fellow SLAS member for the Lifetime Achievement Award, simply send an email to any member of the SLAS Board. We welcome your suggestions as we celebrate those who make our society such a special and uplifting community.



# Explore the Cosmos with the NASA Night Sky Network!



Krista Lemoine, one of SLAS's NASA Night Sky Coordinators educating a mother and daughter about the aurora at our May 31, 2025, SPOC Star Party.  
Photo Credit: Jenette Scott

If you've been to a recent public star party at the Stansbury Park Observatory Complex (SPOC), you may have noticed something exciting: a table full of fun science projects, curious kids (and adults!), and colorful creations. That's the NASA Night Sky Network in action!

The Salt Lake Astronomical Society (SLAS) is proud to be a member of the NASA Night Sky Network (NSN), a national coalition of astronomy clubs that love sharing the wonders of the universe with their communities. This partnership gives us access to a wide variety of educational toolkits, interactive activities, and hands-on demonstrations designed by NASA educators and scientists. And trust us, they're a blast!

SLAS member Krista Lemoine and SLAS Vice President and Nova Newsletter Editor Jenette Scott serve as NSN Coordinators for SLAS. Together, they've been bringing space and astronomy to life and helping make our public outreach even more engaging and memorable.



At our most recent SPOC star party, the NSN table featured a project to “make your own aurora.” Using black construction paper, a printed template, oil pastel crayons, and a paper towel for smudging the light, kids got to recreate the beautiful, glowing arcs of the northern lights. As they blended colors and learned how solar wind interacts with Earth's magnetic field, you could see both creativity and curiosity light up their faces. It was science and art, what could be better?

Being a part of the NSN helps SLAS enrich our outreach events with exciting, hands-on experiences like this. It’s a great way to inspire future scientists, connect with families, and add a little extra sparkle to our already amazing star parties.

So next time you come out to SPOC on a clear night, look for the NASA Night Sky Network table. Stop by, try out an activity, ask questions, and have some fun with space science! We promise there’s something for everyone, young, old, and starry-eyed.

Sample of the colorful  
aurora made at the NSN  
table May 31, 2025  
Photo Credit: Jenette Scott





# Got Questions? Your Guide to the Galaxy Begins Here!

## ***Welcoming Benjamin Stevens – SPOC’s Resident Encyclopedia of the Universe***



Photo Credit: Patrick Wiggins

If you’ve attended a public star party at SPOC lately, you may have noticed a friendly face ready to greet guests, answer questions, and dive into conversations about the cosmos with astonishing depth and enthusiasm.

That’s Benjamin Stevens, and we’re proud to officially welcome him aboard as an honorary appointee of the SLAS Board!

Benjamin has an incredible passion for astronomy and space science. His mind is like an encyclopedia—overflowing with knowledge about stars, planets, nebulae, space missions, and just about anything you might point to in the night sky. Ask him a question about the universe, and you’re in for a thoughtful, thorough, and often awe-inspiring answer.

He has already become a valuable part of the SPOC experience, helping guests, young and old, connect with the sky in meaningful ways. Whether it’s explaining the phases of the moon or guiding a curious visitor to Saturn’s rings through a telescope, Benjamin brings clarity, warmth, and joy to the moment.

Benjamin also lives with autism, and we celebrate the unique perspective and gifts he brings to our community. SLAS is committed to being a welcoming and inclusive space for people of all abilities who share a love for the stars. We believe that diversity strengthens our mission and helps all of us see the universe—and each other—more clearly.

Please join us in thanking Benjamin Stevens for generously sharing his time, energy, and knowledge. If you see him at SPOC, don’t be shy—say hello, ask a question, or just enjoy a great conversation about the cosmos. We’re lucky to have him as part of our SLAS family!



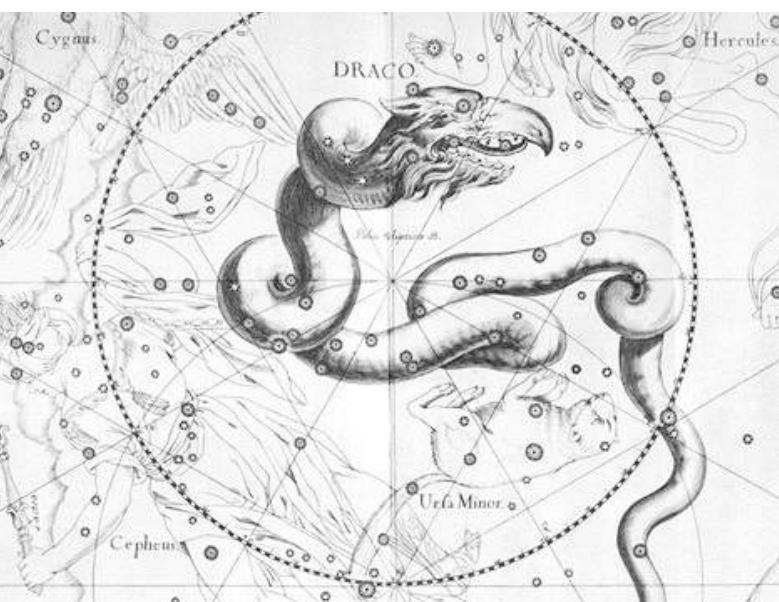
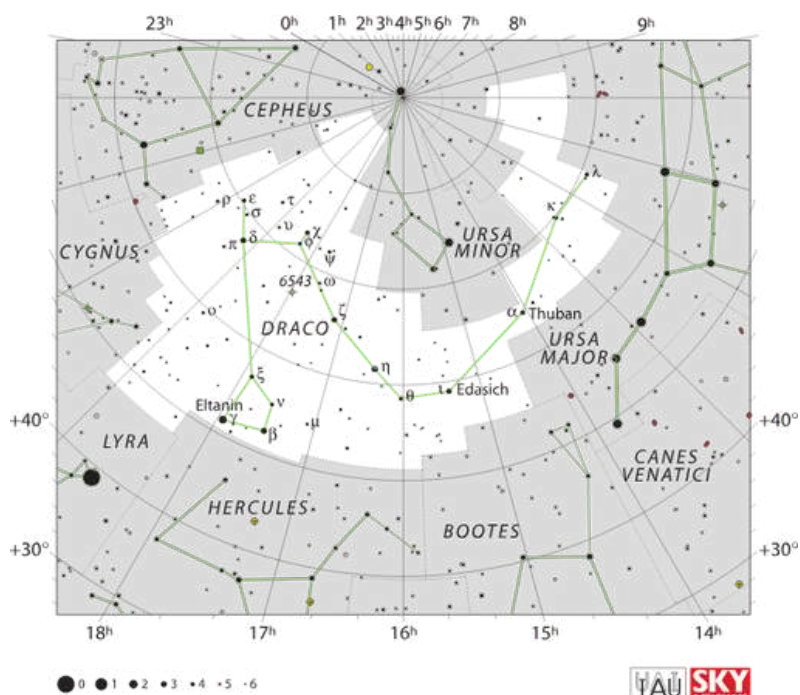
# Constellation CORNER

By: Krista Lemoine

## Draco

Coiled around the North Pole is the constellation Draco, linked to the dragon Ladon, who was slain by Heracles. Ladon guarded the golden apple tree given to Hera by Zeus, overseen by the Hesperides, who were unreliable in their duties. To protect the apples, Hera placed Ladon around the tree. Descriptions of Ladon vary, with Apollodorus claiming he had one hundred heads and could speak, while Hesiod only mentions his lineage. Heracles killed Ladon with poisoned arrows to complete one of his labors. Afterward, the Argonauts found Ladon's body near the apple tree, mourned by the Hesperides. Draco was then immortalized in the sky, with another legend recounting Cadmus's battle against a dragon that protected a sacred spring, leading to his victory and the planting of the dragon's teeth.

## THE DRAGON JULY/AUGUST 2025



## ASTRONOMICAL LEAGUE OBSERVING TARGETS

Messier	Herschel 400	Urban	Double Star
M102	NGC 3147 NGC 5866 NGC 5907 NGC 5982 NGC 6543	None	16/17 Draconis Mu Draconis Nu Draconis Psi Draconis 40/41 Draconis

Click [here](#) for the list of Astronomical League Observing Programs.

## MESSIER 102 SPINDLE GALAXY

Magnitude: 10.74

Approximate distance from

Earth: 50 million light-years

Location: 15h 06m 29.5s

(right ascension),

+55° 45' 48" (declination)



M 102

PHOTO: NASA/ESA HUBBLE

## NGC 6543 CAT'S EYE NEBULA

Magnitude: 9.8

Approximate distance from

Earth: 3,300 light-years

Location: 17h 58m 33.423s

(right ascension),

+66° 37' 59.52" (declination)



NGC 6543

PHOTO: NASA/ESA HUBBLE

## WHERE IS THE DRACO CONSTELLATION?

To locate the Draco constellation, search for its elongated, twisting chain of stars nestled between the Big Dipper (Ursa Major) and the Little Dipper (Ursa Minor), with its tail stretching between the two. The tail of Draco is positioned near the bowl of the Big Dipper, while its head is situated closer to the constellation Hercules.

### NEXT ISSUE:

*Cassiopeia*

THE QUEEN

SEPTEMBER/OCTOBER 2025

## 10 BRIGHTEST STARS IN DRACO

- γ Draconis - Eltanin - 2.23
- η Draconis - Athebyne - 2.74
- β Draconis - Rastaban - 2.79
- δ Draconis - Altais - 3.07
- ζ Draconis - Aldhibah - 3.17
- ι Draconis - Edasich - 3.29
- χ Draconis - 3.57
- α Draconis - Thuban - 3.65
- ξ Draconis - Grumium - 3.75
- ε Draconis - 3.83

## OTHER DEEP SKY OBJECTS IN DRACO

- NGC 4125 - Galaxy
- NGC 6015 - Galaxy
- NGC 6340 - Galaxy
- NGC 6503 - Galaxy
- NGC 6643 - Galaxy



# *A Night with the Universe*

By: Jenette Scott

**Come spend a night with the universe,  
Where starlight gleams and planets traverse.**

**Telescopes turn, and eyepieces define,  
Wowing us with astronomical design.**

**At SPOC, through the comos we roam,  
With skies so vast, we all feel at home.**

**SLAS isn't only about stars aglow—  
But amazing members you'll want to know.**

**With every scope and every smile,  
We share the sky and stay awhile.**

**From first-time guests to seasoned guides,  
It's laughter and friendship our society provide.**

**Come join the Salt Lake Astronomical crew,  
Where galaxies dazzle and fun times ensue.**



Don Abernathy  
chilling with  
his scope.



Telescopes as  
far as the eye  
can see!



Luke Mose's legs, Rob,  
Leslie Fowler,  
Hayden Wilde, and  
Cameron chatting while  
waiting for Earth's closest  
star to set.



Trevor Hebditch sharing  
interesting facts about  
astronomy.



Patrick Wiggins has  
the most adorable  
baby Dobsonian  
ever!



# Dark Sky Advocate Page

## **Darkness in Decline: The Global Spread of Artificial Night Light**

Light pollution is spreading, and not just in perception, but in measurable amounts.

In a critical study published in Science Advances (2017), Kyba et al. investigated a serious, yet not often asked question: How much brighter is Earth becoming at night?

Using satellite data from 2012 to 2016, the research team set out to quantify global trends in artificial light use, both in terms of the increased areas being lit and the increased brightness of those areas.

### **A Night Lost in Light**

What they found is concerning:

The surface area artificially lit at night grew by 2.2% per year. The overall brightness (radiance) increased by 1.8% annually.

Most of the increase occurred in developing countries, while lighting stabilized or declined slightly in some wealthier nations with mature infrastructure.

The study relied on VIIRS (Visible Infrared Imaging Radiometer Suite), a satellite sensor specifically designed to detect faint light emissions. Unlike older satellites, VIIRS can accurately distinguish low-light signals, allowing for a precise assessment of urban sprawl, lighting upgrades, and even seasonal decorations.

## **Purpose and Significance**

The study's primary goal was to understand how the global transition to more energy-efficient lighting, particularly LEDs, was affecting the total amount of Artificial Light at Night, commonly referred to as ALAN. Surprisingly, instead of decreasing light pollution, cheaper and more efficient lighting has accelerated its spread. This is known as the rebound effect: when efficiency leads to more use, not less.

## **Consequences for Astronomy and Earth Life**

This is not just bad news for astronomers. Excess light at night:

- \*Obscures the stars, degrading both amateur and professional observation.
- \*Disrupts wildlife, especially nocturnal animals whose life cycles depend on darkness.
- \*Impacts human health, contributing to sleep disorders, mental health issues, and hormonal imbalances such as suppressed melatonin production.

Here in Utah, where SLAS members treasure dark sky sites, this trend poses a real threat. The Wasatch Front's growth means proactive policy and public awareness are more important than ever.

## **What Can We Do?**

- \*Support local ordinances for fully shielded outdoor lighting.
- \*Encourage the use of warm-colored LEDs (<3000K) to minimize skyglow.
- \*Spread awareness at star parties, schools, and city councils.



Preserving the night sky is not just advocacy; it's our environmental stewardship that we all need to work together to achieve.

## Want to Learn More and Get Involved?

Read the full open-access study here:

<https://pmc.ncbi.nlm.nih.gov/articles/PMC5699900/>

Read why we should care about dark skies here:

<https://astronera.org/blog/dark-sky-conservation/why-care-about-dark-skies>

Get involved here:

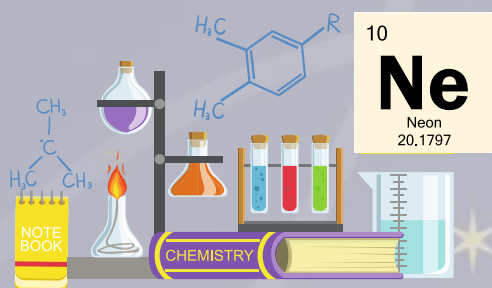
<https://www.darkskyutah.org/>

Five Lighting Principles for Responsible Outdoor Lighting		 DarkSky	 Illuminating Engineering Society
Responsible outdoor lighting is	<b>1 Useful</b>	<b>Use light only if it is needed</b> All light should have a clear purpose. Consider how the use of light will impact the area, including wildlife and their habitats.	
	<b>2 Targeted</b>	<b>Direct light so it falls only where it is needed</b> Use shielding and careful aiming to target the direction of the light beam so that it points downward and does not spill beyond where it is needed.	
	<b>3 Low Level</b>	<b>Light should be no brighter than necessary</b> Use the lowest light level required. Be mindful of surface conditions, as some surfaces may reflect more light into the night sky than intended.	
	<b>4 Controlled</b>	<b>Use light only when it is needed</b> Use controls such as timers or motion detectors to ensure that light is available when it is needed, dimmed when possible, and turned off when not needed.	
	<b>5 Warm-colored</b>	<b>Use warmer color lights where possible</b> Limit the amount of shorter wavelength (blue-violet) light to the least amount needed.	

Credit: Dark Skies Utah



# The Astronomer's Periodic Table of Elements



## Neon

When people hear the word "neon," many may think of glowing pizza signs or other glowing signs on city streets. But beyond Earth's atmosphere, neon plays a quiet but essential role in the structure and story of our universe.

### Where Is Neon Found in Space?

Though colorless and chemically inert, neon is far from insignificant. It ranks as the fifth most abundant element in the universe by mass, after hydrogen, helium, oxygen, and carbon (Asplund et al., 2009). In space, neon is primarily found in:

- \*Stars, particularly massive ones, where it is formed during carbon-burning processes late in a star's life.
- \*Planetary nebulae and supernova remnants, where it is released into space after a star expels its outer layers or explodes. These glowing remnants often show strong neon emission lines in the infrared spectrum.
- \*The interstellar medium (ISM), where ionized neon (Ne II and Ne III) helps astronomers trace conditions in star-forming regions and H II regions—the glowing clouds of gas surrounding young stars.

Our own Sun and solar wind contain neon, although it's hard to observe directly due to its lack of visible spectral lines.

# Neon's Role in the Universe

While neon doesn't bond with other elements to form compounds, it still plays a crucial role in astrophysics.

## 1. A Diagnostic Tool for Astronomers

Ionized neon emits strong infrared lines, particularly at  $12.8\text{ }\mu\text{m}$  (Ne II) and  $15.6\text{ }\mu\text{m}$  (Ne III). These lines are used by space telescopes like the Spitzer Space Telescope and JWST to:

- \*Determine temperatures and densities in star-forming regions
- \*Understand stellar feedback in galaxies
- \*Measure metallicity in distant galaxies (Rigby & Rieke, 2004)

Because neon is not easily depleted onto dust grains, it gives a cleaner measurement of interstellar gas conditions compared to some other elements.

## 2. Part of Stellar Evolution

In massive stars, neon builds up in the core after helium and carbon fusion phases. Its presence influences the dynamics of supernova explosions and the structure of resulting white dwarfs and neutron stars. Models of stellar evolution must account for neon to accurately simulate how stars age and die (Woosley & Heger, 2002).

## 3. Galactic Enrichment

When stars die, neon is returned to the interstellar medium, contributing to the chemical enrichment of galaxies. This process helps seed the next generation of stars and planets with heavier elements.

## Conclusion

Neon may not shine in the visible sky like some of its elemental cousins, but it glows brilliantly in the infrared, helping astronomers decode the hidden processes shaping stars and galaxies. From the hearts of massive stars to the faint wisps of interstellar clouds, neon silently marks the movements of matter and energy across the universe.

## References

-Asplund, M., Grevesse, N., Sauval, A. J., & Scott, P. (2009). The chemical composition of the sun. *Annual Review of Astronomy and Astrophysics*, 47, 481–522.

<https://doi.org/10.1146/annurev.astro.46.060407.145222>

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-Woosley, S. E., & Heger, A. (2002). The evolution and explosion of massive stars. *Reviews of Modern Physics*, 74(4), 1015.

<https://journals.aps.org/rmp/abstract/10.1103/RevModPhys.74.1015>





**HELP!**



## Telescope Repairs and Maintenance

Need help with your telescope? Whether it's alignment, collimation, cleaning, or repairs — I'm here to help!

I'm Max, and I'm experienced with Meade, Celestron, iOptron, and Orion/Skywatcher equipment, but I'm happy to work on any telescope. I've cleaned optics, tuned GoTo systems, repaired mounts, and handled a wide range of issues.

If you're having trouble or just need advice, reach out — let's get your telescope back under the stars!

Contact: [maxbyerly@icloud.com](mailto:maxbyerly@icloud.com)



# Pssst! Need a Telescope?



Do you want to use a telescope, but don't have the space for one, or the money for one? There are a couple of options for borrowing a telescope. One is from our Salt Lake County Libraries and the other is if you join SLAS, you can borrow a telescope as part of membership benefits.



To reserve Telescopes, please call Customer Service 801.943.4636 or stop by your local branch and talk with a librarian.



## Telescopes THE SALT LAKE COUNTY LIBRARY SYSTEM

The County Library is lending a limited number of Orion StarBlast Telescopes at each branch. The County Library's telescope lending program is made possible through a partnership with the Salt Lake Astronomical Society. Follow the safety rules and don't look at the sun! Enjoy this STEM experience.

- Telescopes are located at all libraries for check out, subject to availability
- Only 1 telescope per library card
- The Telescope and all peripheral materials (fanny pack, eyepiece, rubber eye guard, lens covers, view finder, books, head gear, brush pen, instructions, batteries, and base) must be returned together in the condition in which they were checked out and on the same day in which the Telescope is returned

To see all participating libraries in the telescope loaner program in Utah, click on this link: Utah ([librarytelescope.org](http://librarytelescope.org)).



SLAS has several telescopes and H-Alpha solar scopes that can be checked out to **MEMBERS ONLY.**

Please click [HERE](#) for details.





# K-12 Astronomy Lab

## **Perseids: The Amazing August Meteor Shower** **How and When to Watch Nature's Dazzling Sky Show**

Every August, the night sky puts on a stunning performance—and you don't need a telescope to enjoy it! The Perseid meteor shower is one of the brightest and most exciting sky events of the year. In 2025, it will be at its best on the night of August 12 into the early morning of August 13.

### **Where Do Meteors Come From?**

The Perseids happen when Earth travels through a trail of space dust left behind by Comet Swift-Tuttle. As Earth passes through this dusty path, the tiny bits of rock and ice streak into our atmosphere and burn up, creating what we call meteors or "shooting stars."

They're called Perseids because they appear to come from the direction of the constellation Perseus in the northeastern sky.

### **When to Look Up**

Although the Perseids can be spotted from July 17 to August 24, the best time to watch is during their peak, which in 2025 is the night between August 12 and 13.

Here's how the radiant (the point where the meteors seem to come from) rises in the sky over Salt Lake City on that night:

### **Time Direction Altitude**

8:00 PM North (6°) 9.5°

10:00 PM North-northeast (21°) 14.7°

Midnight North-northeast (33°) 25.0°

2:00 AM Northeast (42°) 38.9°

4:00 AM Northeast (44°) 54.5°

6:00 AM North-northeast (29°) 68.5°

**Best Viewing Time:** After midnight when the radiant is higher—this means more meteors will be visible!

### **How to Watch Meteors:**

Find a dark spot away from city lights (a backyard, park, or campsite works great).

Bring something comfy to lie on, like a blanket or lawn chair.

Give your eyes time to adjust (20–30 minutes). Avoid looking at bright phone screens.

Look up and be patient! You may see 60 to 100 meteors per hour at peak, especially in dark skies.

### **Did You Know?**

\*Most meteors are no larger than a grain of sand, but they burn super bright!

\*The Perseids can create fast, colorful streaks, and some leave glowing trails.

\*Meteor showers are predictable because they happen as Earth orbits the Sun and revisits the same dust streams each year.

## Fun Activity:

### Start a Meteor Log!

Use a notebook or piece of paper to record:

\*What time did you see each meteor?

\*How bright it was (1 = dim, 5 = super bright!)

\*What direction did it come from?

\*Any colors or trails?

Compare with friends or family and see who saw the most!

### Want to Learn More?

Visit NASA's site for kids:

<https://spaceplace.nasa.gov/meteor-shower>

Visit the Time and Date site:

[https://www.timeanddate.com/astronomy/meteor-shower/perseid.html?os=\\_\\_&ref=app](https://www.timeanddate.com/astronomy/meteor-shower/perseid.html?os=__&ref=app)







## **SLAS Board Meeting Agenda**

May 14th, 2025

7:00 PM

Denny's Restaurant – Redwood Road and North Temple

**Board Members in Attendance:** Trevor Hebditch, Jenette Scott, Hayden Wilde, Rachel Henderson

**Other Members in Attendance:** Aleta Cox, Patrick Wiggins, Tony Sarra, Don Abernathy, Bradley DeDea, and Joan Carman

President Trevor Hebditch called the meeting to order at 7 pm.

### **OFFICE REPORTS**

**Astronomical League Contact – Aleta Cox – ASTROCON 2025:** AL is having their annual meeting the day before ASTROCON. Invited all committee members to go to dinner at Ruby's on Monday before the festival starts. Please send an email to Lowell if you're planning on attending that dinner. The next Astrocon planning meeting will be held on May 28<sup>th</sup> at 6pm at Murray Library next meeting.

**AstroLeague:** 2025 Officer Elections & Bylaw amendments vote: SLAS gets 1 vote – Trevor to send blast to all members who are part of AL and ask how they want to vote. Will put docs on shared google space and send out the link to view.

**Library Loaner Scope Coordinator – Joan Carman:** Orion went out of business, put us into a serious bind about where we're going to get the telescopes. High Point Scientific was the best option- they bought all of Celestron's Zhumell's and are also developing their own telescope. They will modify the telescopes before they're sent out. It's taking some time to get them out. Joan ordered 2 telescopes for the Murray City Library and asked High Point to send them to her so that she could check them. She gives High Point high marks- they did a great job modifying the telescopes. Joan will deliver the telescopes to Murray this week.

**Historian – Patrick Wiggins:** Still waiting for the website.

**SPOC Director – Jim Keane:** Not in attendance

**ZAP Grant Writer – Jim Keane:** Not in attendance

**Equipment Manager – Trevor Hebditch / Aleta Cox:** Lending out telescopes again. Have had more donations come through. Michael Cairns (?) donated Celestron NexStar 8. Also had SkyGuider donated w/ all accessories. Trevor will check if equipment list on the website is current.

**NASA Night Sky Ambassador - Krista Lemoine:** Not in attendance

**Newsletter Editor - Jenette Scott:** Just published the May/June issue of the NOVA. Will put Astrocon stuff in the next newsletter.

**Private Star Party Coordinator - Don Colton:** Not in attendance.

**Solar Party Coordinator - Don Abernathy:** Had good turnout and good weather at last party. Need some kind of banner or sign to advertise parties. Don will take the lead on this.

### **BOARD MEMBER REPORTS**

#### **Vice President – Jenette Scott**

**General Update:** Jenette and Leslie went out to SPOC to resilver the Clements. Figured out a better way to do the mixing and silvering- can do the 70” mirror in an hour. Got the secondary mirror down to 30 minutes. Mike is really happy with it. Jenette is writing a procedural manual. When the weather is better, she wants to pull the Clements out and clean the floor using a super cool chemistry thing that I don’t understand ☺

**Media coverage:** Jenette appeared on Fox 13 for Dark Sky Week. Did KRCL Radioactive interview May 13<sup>th</sup>. Covered the loaner scopes for the library and SLAS, with fun things to do with kids.

#### **Secretary / Treasurer – Rachel Henderson**

**Financial Report:** Presented to those in attendance.

**Additional Star Party Flyers:** Hayden will email her contact at the library and CC Rachel.

**SLAS Swag:** Rachel will look into buying small trinkets we can hand out at star parties and other events. \$1,000 budget.

#### **Board Member – Hayden Wilde**

##### **Events since our last meeting:**

- Civil Air Patrol - SPOC party, RESCHEDULED (Weather)
- Taylorsville Library - 180 attendees, 11 volunteers, great skies.

##### **Upcoming Private Star Parties:**

- Camp Wapiti - (May 28th: 7:00pm) Their Location, Lecture only
- Civil Air Patrol - (June 13th: Dusk) \*Date Not Confirmed\* Will be held at SPOC, with a Lecture and Star Party! This event will be open to those who would like to set up a scope on the grass, or operate an observatory telescope, a SLAS blast will be sent out after the date is confirmed.
- Ritzy Rescue Ranch - (July 26th: Dusk) will be held at their farm in Tooele, Star Party only. All are welcome to come set up a scope, SLAS blast will be sent out when closer.

##### **Upcoming Library Parties:**

- Magna Branch - (May 30th: Dusk)

**Board Member** – Max Byerly resigned from his position. Trevor taking over Max’s duties temporarily until a new board member is confirmed.

#### **President – Trevor Hebditch:**

**Vacant Board Seat:** Trevor recognized and thanked Max for all his work on the board. He went over the process for appointing a new board member. Per the Constitution- Board vacancies shall be filled within 30 days by the remaining board. Trevor will put out SLAS Blast asking for volunteers- and ask again at the next General Meeting. If no person comes forward, the board will make a recommendation / appoint someone.



**Lifetime Achievement Award:** Not about membership. Just want to recognize these individuals.  
Recognition Plaque at SPOC and Certificate. Rachel made a motion, Jenette seconded, passed unanimously.

**SLAS Website and Social Media – Ken / Jim / Tony:** Website will be ready by next week! Ken doing a data sync this weekend. Barring any other issues, we can flip the switch next Wednesday night during the general meeting. THANKS KEN. Send website hosting financial needs to Rachel.

**Instagram:** Trevor recovered the sl\_astronomy Instagram account. THANKS TREVOR.

#### **Society Improvement Ideas**

- **Stand at Star Parties:** Christopher Stevens- honorary appointed position to man the booth.
- **More participation or visibility within the community?** Participating in larger civic events such as Stansbury Days, Farmers Markets, Art shows, etc.

#### **Other/Missed Items**

**Patrick:** Has a collection he's not sure what to do with. Complete set of Sky and Telescope. Complete collection of Astronomy Magazine, Star and Sky. Trying to find an organization that would take them and not sell them off or break up the collections.



**SLAS May 2025, General Meeting Notes**  
**Will be added soon**





## **SLAS Board Meeting Agenda**

June 11th, 2025

7:00 PM

Denny's Restaurant – Redwood Road and North Temple

- 1. Welcome**
- 2. Office reports**
  - a. Astronomical League Contact** – Aleta Cox
    - i. ASTROCON 2025
  - b. Library Loaner Scope Coordinator** – Joan Carman
  - c. Historian** – Patrick Wiggins
  - d. SPOC Director** – Jim Keane
  - e. ZAP Grant Writer** - Jim Keane
  - f. Equipment Manager** – Trevor Hebditch / Aleta Cox
    - i. Opening back up the loan program
    - ii. Donation of equipment
      - i. Brian McMahon: 14-inch Mead Lightbridge Dobsonian Telescope
  - g. NASA Night Sky Ambassador** - Krista Lemoine
    - i. Creation of email address
  - h. Newsletter Editor** - Jenette Scott
  - i. Private Star Party Coordinator** - Don Colton
  - j. Solar Party Coordinator** - Don Abernathy
    - i. Additional Banner update
- 3. Board Member Reports**
  - a. Vice President** – Jenette Scott
    - i. General Update
    - ii. Recognition of Ken's website work
    - iii. Additional Star Party Flyers
  - b. Secretary / Treasurer** – Rachel Henderson
    - i. Financial Report
    - ii. SLAS swag update- stickers, magnets, wristband keychains, pens- \$660.54. ASTROCON magnets for swag bags- \$204.69. Kids trinkets ~\$130. Total ~\$996.

**c. Board Member – Hayden Wilde**

i. Upcoming Private Star Parties:

1. Civil Air Patrol - THIS FRIDAY: June 13th, at dusk. Will be held at SPOC, with a Lecture and Star Party! This event will be open to those who would like to set up a scope on the grass, or operate an observatory telescope. No one has responded to the SLAS blast, so volunteers on observatory telescopes are extra encouraged at this time.
2. Ritzy Rescue Ranch - July 26th: Dusk. will be held at their farm in Tooele, Star Party only. All are welcome to come set up a scope, SLAS blast will be sent out when closer.
3. Red Butte Gardens - August 18th 6-8pm. Joining Red Butte Gardens nature night, for a solar telescope viewing with Don, and a table set up.

**d. Board Member – Vote to appoint Brad DeDea**

**e. President – Trevor Hebditch**

- i. Recognition to Ken for all his work on the website
- ii. Lifetime Achievement Award
  1. Marlene Egger because of her work & service in training people on the Bogdan refractor by Rose Difley
- iii. SLAS Website and Social Media – Ken / Jim / Tony
- iv. Change of Member At Large responsibilities
  1. Board Member at Large - Hayden – will assume the responsibilities of SPOC Star Party coordination
  2. Board Member at Large - Brad (TBC) - will assume website and social media coordination and management
- v. Questions over obligations to follow OPMA - There is no obligation either in OPMA ([Utah Code §§ 52-4-101 et seq](#)) or by the County. Both a County DA legal representative and Samantha Thermos, director of ZAP, both confirmed that it is a “request” when a ZAP contract is active, and not an obligation after it expires. With that clarification we should still be totally open and transparent and not change our policy of open regular board meetings.
- vi. Society Improvement Ideas
  1. Stand at Star Parties - success and plan for next events
  2. More participation or visibility within the community? Participating in larger civic events such as Stansbury Days, Farmers Markets, Art shows, etc.
  3. Collaboration with Clark Planetarium update Collaboration with Utah Natural History Museum
  4. Swap Meet and Loaner Program Sale (August???) plus invite other local clubs
- vii. Proposed Constitution Changes Notice



1. (see addendum below) Will be posted in Newsletter, announced at this meeting, the general meeting and a SLASBlast for a member discussion and vote at the July General meeting as per the constitution Article VIII Constitutional Amendments and Bylaws

**f. Other/Missed Items**

**Addendum - Article VIII Constitutional Amendments and Bylaws A. Any member may propose amendment(s) and/or bylaws.**

**Article VIII Constitutional Amendments and Bylaws**

A. Any member may propose amendment(s) and/or bylaws.

B. The amendment and adoption process shall be:

1. The proposed amendment(s) and/or bylaw(s), hereinafter called "amendment", shall be published in the journal along with notice that the proposed amendment will be discussed at the next general meeting.
2. The proposed amendment shall be discussed at the next general meeting.
3. The following journal will include:
  - a. The pros and cons concerning the proposed amendment written by advocates on each side.
  - b. Notification that a vote on the proposed amendment will take place at the next general meeting.
  - c. Absentee ballots for the amendment.
4. The proposed amendment will be voted on during the next general meeting by the memberships present and absentee ballots.
5. The proposed amendment will be adopted if 2/3 of the votes cast favor adoption.

**Change 1 Vote**

**Change Article IV Officers - B.** Terms of office shall be one year beginning the first of January following the general election of officers and ending the 31st of December of the same year. No member may serve on the Board for more than two out of any three consecutive years. Board vacancies shall be filled within 30 days by the remaining Board.

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**Change Article IV Officers - B.** Terms of office shall be one year beginning the first of January following the general election of officers and ending the 31st of December of the same year. No member may serve on the Board for more **than** two out of any three consecutive years, **unless an extension is approved as per Article V Elections and Voting Procedures - A. Eligibility - part 4.** Board vacancies shall be filled within 30 days by the remaining Board.

**Add to Article V Elections and Voting Procedures - A. Eligibility - Part 4:**

- 4) A board member, who has already served 2 years on the board, can be re-elected for an additional year if the following process is followed:
  - a) A board member, who is not related, proposes the extension at the August board meeting.
  - b) The remaining board members support the motion to allow for the extension at the August board meeting and the motion is announced at the August general meeting.
  - c) Four (4) additional current members, who are also not related to any board member, and in good standing, support the motion via a written notification to the board.

d) The existing board member can then submit their name for the same position they currently hold and the normal constitutional election process is followed.

#### **Add to Article II Membership - Parts C and D:**

##### **Change 2 Vote**

**Add a new class of membership as part C** - An Associate Member (non-voting): Reserved for teachers or professionals that provide STEM/astronomy education/programs in approved educational organizations/facilities. They would not pay dues, thus have no voting rights, but would receive the newsletter, SLASBlasts, etc. They must pay the SPOC fees if they wish to use the facilities and have followed the training SLAS requires.

##### **Change 3 Vote**

**Add a new class of membership as part D** - A Honorary Member: Reserve for members who have been in the society for more than 10 years and have been recognized by the board and received an achievement award. To vote they would need to pay the normal fee, otherwise just have the same rights as normal members. They must pay the SPOC fees if they wish to use the facilities and have followed the training SLAS requires.

##### **Change 4 Vote - Dependant and would need to be modified appropriately depending on change 2 and/or 3 being approved**

**Change to Article VI Finances - A.** Annual memberships dues shall be as recommended by the Board of Directors and ratified by a 2/3 majority of those memberships present at a regularly scheduled general meeting. All memberships shall pay the same dues.

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**Change to Article VI Finances - A.** Annual **membership** dues shall be as recommended by the Board of Directors and ratified by a 2/3 majority of those memberships present at a regularly scheduled general meeting.

- a) **All regular members shall pay the same dues.**
- b) **Associate members do not pay a membership fee.**
- c) **Honorary members do not pay a membership fee unless they wish to vote.**





**June 2025, General Meeting  
will be added soon**