

TROVE Rules

Tool for Rapid Object Vetting and Examination (Treasure TROVE)

Version: 1.0

Effective date: 2 September 2026

Applies to: datatrove.as.arizona.edu, the TROVE API, the TROVE Slack workspace, TROVE GitHub organizations, and TROVE-related meetings

TROVE is a multimessenger astrophysics collaboration. We are building a public, open-source, API-enabled web platform for real-time vetting and scoring of electromagnetic transients, with the goal of making follow-up of poorly localized events—especially gravitational-wave (GW) localizations—more efficient.

TROVE is led primarily by researchers at the University of Arizona, UC San Diego, and Northwestern University, with collaborators at other institutions. It is funded by the National Science Foundation under awards AST-2432037 and AST-2432036. The production site is hosted at Steward Observatory. Public information about the project lives at astro-trove.github.io. Software is developed under the [astro-trove](https://astro-trove.github.io) GitHub organization.

These Rules are the standard of professional behavior for everyone who uses TROVE. You agree to it when you register for a website account or when you are given access to the TROVE Slack workspace. It also applies if you use the API, comment on candidates, contribute code, or represent TROVE at a meeting.

These Rules do not replace the law, your home institution's policies, National Science Foundation (NSF) research-misconduct rules, or the American Astronomical Society (AAS) Code of Ethics. Where those rules are stricter, follow them.

Plain-language summary

This summary does not replace the full Rules.

TROVE is a scientific tool for vetting transients, especially counterparts to gravitational wave events. It is a collaboration website with an API and a Slack workspace.

You agree to these rules when you register for an account (accounts are reviewed before approval) and when you join Slack.

Do: be professional; credit other people; write evidence-based comments; keep tokens and embargoed information private; cite TROVE if you use it in a paper.

Do not: harass anyone; bully students; fake scores or comments; scoop unpublished TROVE work; share logins; spam the API; dump private Slack threads on the internet.

To report a conduct problem: email Charlie Kilpatrick (ckilpatrick@northwestern.edu), Wen-fai Fong (wfong@northwestern.edu) and David Sand (dsand@arizona.edu), or only the PI(s) who are not involved.

For software bugs: <https://github.com/astro-trove/trove/issues>

If you are in crisis in the United States: call or text 988. If it is an emergency, call 911.

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1. Purpose

TROVE is scientific infrastructure. People use it under time pressure, during GW observing runs, and across career stages. The platform only works if users can trust one another's comments, scores, and conduct.

These Rules exists to keep TROVE:

- **Professional** — collegial, inclusive, and free from harassment
 - **Scientifically honest** — no fabrication, falsification, plagiarism, or scooping of others' unpublished work
 - **Safe for learners** — students and postdocs are not treated as expendable labor or targets
 - **A good steward of data** — API keys, embargoed notices, and unpublished discussion stay in the right places
 - **Usable in public** — the website and API are community tools, not a private club, but access is a privilege that can be withdrawn
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2. Who these Rules cover

These Rules apply to every person who participates in a TROVE space, including:

- Anyone who **registers for or is granted a TROVE website account** at datatrove.as.arizona.edu (registration is reviewed; approval may take one to two days)
- Anyone who uses the **TROVE API**, including with a token tied to a website account
- Anyone **invited to or given an account in the TROVE Slack workspace**
- Collaboration members, affiliates, students, postdocs, staff, software contributors, and visitors
- Anyone commenting on events, targets, or candidates; uploading or querying data; or otherwise using TROVE features
- Anyone representing TROVE in public (talks, circulars, social media, press) or attending a TROVE meeting, workshop, or hack day
- Anyone contributing to TROVE repositories under github.com/astro-trove

You do not have to be a named collaboration member to be bound by these Rules.

PIs, developers, and senior members are held to the same standard, and a higher duty of care, because they control access, mentoring, and scientific credit.

3. How you agree

Agreement is required. It is a condition of account approval and of Slack access.

3.1 Website and API accounts

To use TROVE you register at datatrove.as.arizona.edu/accounts/register/. You provide a username, name, email, affiliation, and password. Accounts are not automatically active; TROVE administrators review registrations.

Before an account is approved, you must confirm that you have read and agree to these Rules. The registration checkbox (or equivalent confirmation sent with approval) is contained in **Appendix A**.

If a supervisor, PI, or group registers on behalf of a student or colleague, that person must still agree individually when they first log in. Do not share logins or API tokens.

Continued use after we update the Rules is acceptance of the new version. We will post material updates on the documentation site and, when practical, note them in Slack and by email to registered users.

3.2 Slack workspace

The TROVE Slack workspace is invitation-only. By **accepting a Slack invitation, using an account an administrator created for you, posting, or remaining in the workspace**, you agree to these Rules.

Invitation and welcome language is contained in **Appendix B**.

A short reminder will sit in the workspace description and a pinned #welcome (or equivalent) message. If you cannot agree, leave the workspace and tell a TROVE PI so the account can be removed.

3.3 One collaboration, one set of Rules

These Rules cover conduct on the TROVE website, through the API, on the Slack, on the TROVE GitHub, in TROVE meetings, and when you are officially representing TROVE. A violation in one place can lead to action in the others. Harassment on Slack can cost you a website account. Abuse of the API can cost you Slack access. TROVE may also consider off-platform conduct when it threatens TROVE users or scientific integrity—for example, doxxing a user, claiming TROVE scores as solely your unpublished discovery, or leaking embargoed multimessenger information obtained through TROVE.

4. Our standards

We are committed to a professional environment that is welcoming to all participants and free from discrimination, harassment, bullying, and retaliation.

Treat others with respect regardless of age, career stage, disability, ethnicity, gender, gender expression, gender identity, nationality, physical appearance, pregnancy or caregiver status, race, religion, sexual orientation, institutional affiliation, or immigration status.

Pay particular attention to interactions with **undergraduate students, graduate students, and postdoctoral researchers**. Seniority is not a license to belittle, exclude, or take credit.

These standards follow the spirit of the [AAS Code of Ethics](#), the [AAS Anti-Harassment Policy](#), the [LSST DESC Code of Conduct](#) (reused under CC0), and the [Contributor Covenant](#).

5. Expected behavior

- Assume colleagues are acting in good faith, especially during a fast GW follow-up
 - Give credit in comments, papers, talks, and code. Cite TROVE as requested in the documentation
 - Write comments on candidates that are scientific: evidence, references, and classification rationale, not personal attacks on whoever ingested or scored the object
 - Be patient with a tool in development. Open issues on GitHub; do not mock maintainers or users
 - Use people's names and pronouns as they use them
 - Make room for questions from people new to multimessenger astronomy
 - Keep disagreements about a transient on the science, not the person
 - Stop immediately if someone asks you to stop a behavior
 - Report problems rather than amplifying them in public channels
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6. Behavior that is not allowed

Harassment, discrimination, and bullying

- Insults, slurs, threats, intimidation, stalking, or sustained disruption
- Sexual attention, sexual comments, or sexual images in TROVE spaces. TROVE is not a dating venue.
- Unwelcome physical contact at TROVE meetings
- Mocking someone's English, accent, code, or level of astronomy training

- Exclusion, rumor-spreading, or humiliation of students and postdocs
- Retaliation against anyone who reports a concern in good faith

Scientific misconduct

- Fabrication or falsification of data, photometry, scores, classifications, or comments
- Plagiarism, including pasting another user's TROVE comment or unpublished note into a circular or paper without credit
- Taking credit for others' vetting, software, or follow-up
- Misrepresenting TROVE output as peer-reviewed fact, or hiding uncertainty in a score
- Knowingly violating TROVE, Transient Name Server (TNS), General Coordinates Network (GCN), LIGO-Virgo-KAGRA (LVK), or telescope-proprietary rules you have agreed to elsewhere

Platform and privacy abuse

- Sharing another person's private information (email, location, unpublished affiliation details) without permission
- Sharing screenshots of Slack DMs or private comments except when sending them as part of a report
- Sharing login credentials or API tokens
- Scraping or querying the API in a way that degrades service, bypasses access controls, or harvests other users' content for a competing product without permission
- Creating extra accounts to evade a suspension
- Installing Slack bots or GitHub automations that spam or exfiltrate member lists

This list is not exhaustive. Conduct that a reasonable colleague would see as hostile, dishonest, or unsafe can still be a violation.

7. Scientific integrity on TROVE

TROVE ranks and comments on candidate electromagnetic counterparts. Those comments influence telescope time. Treat them as part of the scientific record.

- Base comments on evidence you can state. Mark speculation as speculation.

- Do not vandalize, flood, or joke-spam candidate comment threads during an event.
- Do not delete or overwrite others' comments to hide a disagreement. If the software allows edits, leave a trail.
- If you used TROVE in a paper, circular, or proposal, **cite the TROVE papers listed in the project README** and describe how you used the platform.
- Unpublished TROVE discussion (Slack messages; internal notes) is not yours to announce as a first discovery without talking to the people who did the work.
- Coordinate public claims about an ongoing event with care. TROVE does not replace GCN, TNS, or your collaboration's publication policy, but it also does not exist so someone can scoop a student who just posted a useful comment.

NSF research misconduct (fabrication, falsification, plagiarism) remains NSF research misconduct whether it happens inside or outside TROVE. Institutions will be notified when required.

8. Website, API, and data

- Use an affiliation and name that a colleague could recognize. Do not impersonate another astronomer.
 - Keep your password and API token private. Rotate a token if it leaks.
 - Respect access controls. If a page, group, or event stream is limited, do not scrape it out to the public web.
 - Embargoed or partner-only multimessenger notices (for example some LVK or telescope ToO material) must not be pasted into public TROVE comments or public Slack channels. If you are unsure, ask a PI before posting.
 - Do not use TROVE to store or distribute export-controlled or personally identifying non-scientific data.
 - Automated clients must identify themselves reasonably (user agent or documented app name) and back off if the service asks.
 - TROVE is in development. Features will break. Report issues at github.com/astro-trove/trove/issues. Do not claim a scientific result is "TROVE's official classification" unless the documentation says that product is released for that use.
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9. Slack workspace

Slack is for collaboration: event coordination, software, and questions. It is not a substitute for GCN, and it is not a crisis line.

- Use the channel meant for the topic. Use threads.
 - Do not @channel or @here unless you are an administrator and there is an urgent, workspace-wide operational need (for example the site is down during an on-sky event).
 - Direct messages are still covered by these Rules. Do not use DMs to harass, solicit, or pressure a student.
 - Do not post observer home addresses, unpublished phone numbers, or grant-review gossip.
 - Do not screenshot Slack to mock someone on social media.
 - Alt-text on images helps. Avoid flashing GIFs.
 - Slack is not 24-hour on-call for most users. Silence is not rudeness. During an active GW event, follow whatever operations channel the collaboration designates.
 - If you leave TROVE or your website account is closed, Slack access may be removed at the same time.
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10. GitHub and software

- Follow ordinary open-source civility in issues and pull requests.
 - Review code, not people. “This function is wrong because X” is fine. “You are incompetent” is not.
 - Do not push secrets (tokens, .env files, database dumps with user emails) to TROVE repositories.
 - License and citation files in each repo still apply.
 - Maintainers may hide, lock, or refuse contributions that violate these Rules.
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11. Meetings, workshops, and talks

In-person and virtual TROVE gatherings use these Rules plus ordinary meeting norms:

- No sustained disruption of talks

- No photography or recording of a person who has asked not to be recorded (speakers on the program may be recorded if that was announced)
- No unwelcome physical contact
- If asked to leave a session by a designated contact person, leave

TROVE may designate two meeting contact people for a collaboration meeting, following DESC practice.

12. Reporting a problem

You do not have to confront the person yourself.

Rules reports (harassment, bullying, scientific integrity on TROVE, Slack or website abuse) go to the TROVE principal investigators. Email **all three**, unless the complaint involves any of these PIs, in which case email only the other(s):

- Charlie Kilpatrick, Northwestern University; ckilpatrick@northwestern.edu
- Wen-fai Fong, Northwestern University; wfong@northwestern.edu
- David Sand, University of Arizona; dsand@arizona.edu

Subject line (helpful, not required): TROVE Rules report

Include what happened, when, where (website, Slack channel, API, GitHub, meeting), usernames, and screenshots if you have them.

Technical bugs (the site is down, a score looks wrong because of software): open a GitHub issue on [astro-trove/trove](https://github.com/astro-trove/trove). If a “wrong score” might be misconduct rather than a bug, use the PI emails instead.

Timing. We aim to acknowledge a conduct report within **three business days** and to complete an initial review within **ten business days**. Safety issues may be acted on immediately.

If the report is about a PI, contact the other PI(s). You may also use your home institution’s equity office. Because the website is hosted at the University of Arizona, UA’s [Office of Institutional Equity](#) is available for matters that fall under UA policy, including Title IX. Northwestern and UC San Diego have parallel offices for their employees and students.

Imminent harm. Contact local emergency services first. In the United States, 911 for emergencies; 988 for the Suicide & Crisis Lifeline. TROVE PIs are not a crisis service.

Retaliation for a good-faith report is itself a violation. Knowingly false reports meant to harm a colleague are also a violation.

PIs will treat identities as confidential as the investigation allows. They will recuse themselves for conflicts of interest. They may need to tell institutional offices or NSF when policy or law requires it. These Rules do not create an ombuds office; if you want confidential institutional advice, use your university ombuds.

13. Enforcement

TROVE administrators and PIs may remove comments, revoke API tokens, suspend website accounts, and remove Slack or GitHub access.

We generally follow this ladder. We may skip steps when harm is serious, illegal, or repeated.

1. **Correction** — private explanation; edit or delete content; apology if appropriate
2. **Warning** — written conditions (for example no contact with a person; no commenting during an event)
3. **Temporary suspension** — account, API, and/or Slack paused for a set time
4. **Permanent removal** — accounts closed; future registrations denied

TROVE may also restrict access based on sanction by a home institution, another collaboration (including LVK), or a professional society when that sanction means TROVE users would be at risk.

Enforcement decisions are made by TROVE PIs (or a small committee they appoint), not by a Slack vote. We may tell the reporter whether action was taken without sharing another person's private details.

TROVE is a voluntary scientific collaboration and a research service. Access is not a contractual right to use NSF-funded infrastructure without conditions.

14. Institutional, AAS, and NSF policy

These Rules do not replace:

- Your employment, student, or visitor policies
- The University of Arizona's [Nondiscrimination and Anti-harassment Policy](#) and [Office of Institutional Equity](#)
- Northwestern and UC San Diego equity and research-integrity offices, for people based there
- [AAS Code of Ethics](#) and [AAS Anti-Harassment Policy](#)

- NSF research-misconduct policy and the responsible and ethical conduct of research requirements attached to AST-2432037 and AST-2432036
- Slack’s Acceptable Use Policy and GitHub’s Acceptable Use Policies
- Any LVK, GCN, TNS, or observatory proprietary-information rules you have separately accepted

TROVE will cooperate with institutional investigations when required.

15. Updates

TROVE PIs may update these Rules. The version and date at the top will change. Material updates will be posted with the documentation and noted to registered users. Continued use is acceptance.

Questions about the Rules themselves may go to the same PI emails.

Appendix A — Website registration language

Users must check off the following on [account registration](#).

☐ I have read and agree to the [TROVE Rules](#). I understand it applies to the TROVE website, API, comments, GitHub, meetings, and Slack. I will not share my password or API token.

The Register (or Activate) control stays disabled until the box is checked. We will store the timestamp, username, Rules version, and the fact of agreement with the account record.

Appendix B — Slack invitation and welcome language

Invitation

TROVE is inviting you to our Slack workspace. This is a scientific collaboration space for people who use the Tool for Rapid Object Vetting and Examination (datatrove.as.arizona.edu).

By joining, you agree to the [TROVE Rules](#). Do not forward this invitation. If a colleague needs access, ask a TROVE administrator to invite them.

Questions: ckilpatrick@northwestern.edu, dsand@arizona.edu, wfong@northwestern.edu

Pinned welcome

Welcome to the TROVE Slack!

1. Read the [Rules](#).
2. Set your display name to the name colleagues will recognize (and affiliation if you want).
3. Use threads. No @channel or @here unless you are an admin during an operational emergency.
4. Keep candidate science comments on the website when they belong in the record; use Slack to coordinate.
5. Do not share API tokens or passwords.
6. Issues go to GitHub; conduct problems go to the PIs indicated in the Rules.

Staying in this workspace means you agree to the Rules.

Attribution

These Rules are TROVE's policy. Its collaboration-conduct sections draw on the [LSST DESC Professional Conduct Policies](#) (CC0), the [AAS Code of Ethics](#), the LVK collaboration [Code of Conduct](#), and the [Contributor Covenant](#) enforcement ladder. Platform-specific rules are written for TROVE's website, API, and Slack.

This is not legal advice. NSF award numbers are listed for identification of the funded project, not as a statement by NSF.