



LGBTSTEM Day

#LGBTSTEMDAY

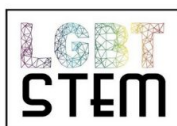
Friday 5th July 2019 will mark the second International Day of LGBTQ+ People in Science, Technology, Engineering and Maths. It is a day to improve visibility and support for LGBT+ people in STEM, and there are lots of ways you can take part—from a single social media post on **#LGBTSTEMDay**, to attending or organising a local event. This toolkit is for anyone who would like to organise an event or get-together to mark LGBTSTEMDay.

Join the conversation online

Join the conversation on social media, with **#LGBTSTEMDay** or **#LGBTQSTEMDay** - whichever you prefer.

- Share stories, images and videos of yourself or your #QueerInSTEM role models.
- Help boost the visibility of LGBTQ+ people in STEM by sharing their posts.
- Show your support for groups and organisations working to support LGBTQ+ people in STEM, including LGBTSTEMDay organisers @PrideinSTEM, @HouseofSTEM, @InterEngLGBT, @OUTinSTEM, @QueersInSTEM, and @500QueerSci.

ORGANISERS:



The essentials

The date

We celebrate LGBTSTEMDay on **the 5th of July** as it can be written as '507' which is (in nanometres) the wavelength of the colour green featured in the rainbow flag, and is representative of nature. If you're in the US, then it's '705' which is the wavelength of the color red, representing life. It's fine if you can't organise your event for the 5th—just organise it for the nearest date that works for you.

The audience

First and foremost, your event should be developed with and for LGBTQ+ people working in STEM; and it should reflect and include the diversity of people, identities, and backgrounds that exist within the LGBTQ+ community. Your audience may also include friends, colleagues and allies of LGBTQ+ scientists. We ask that everyone make their events **free and accessible**, and we've included a suggested code of conduct in the appendix.

The format

The format and content of the event is up to you, but we've put together some ideas, guides, and content to get you started...

Wikipedia Edit-a-thon

When it comes to improving the visibility and representation of LGBTQ+ people in STEM, a great place to start is Wikipedia. For LGBTSTEMDay, we'll be encouraging Wikipedia editors around the world to help improve and expand articles that reference LGBTQ scientists or engineers, scientific topics that relate to the LGBTQ community, queer characters or culture in science fiction, or any article that connects STEM with the LGBTQ community. You can take part in this from the comfort of your own wifi, but edit-a-thons are wonderful social events and a great way to meet like-minded people.

The main things you need to organise an edit-a-thon are:

- An accessible space for the event
- A good wifi connection
- Some food and refreshments
- An experienced Wikipedia editor

Unsurprisingly, Wikipedia has a very useful article on how to organise an edit-a-thon:

https://en.wikipedia.org/wiki/Wikipedia:How_to_run_an_edit-a-thon

Most cities also have local Wikimedia groups that might be interested in helping you organise an LGBTSTEMDay edit-a-thon. This page should help lead you to our local friendly Wikimedians:

https://meta.wikimedia.org/wiki/Wikimedia_user_groups

Finally, to get you started, we've put together a list in the appendix of online articles that can be used as references or resources for the edit-a-thon, as well as a list of Wikipedia articles that could use expanding or updating.

Here's a great article on the impact Wikipedia editing can have on science, featuring the work of Dr Jess Wade, who has given us lots of advice, support, and encouragement to organise LGBTSTEMDay edit-a-thons:

<https://www.theguardian.com/education/2018/jul/24/academic-writes-270-wikipedia-pages-year-female-scientists-noticed>

Make a Spectroscope

If you're looking for something simple and interactive that you can do, perhaps in a school, museum, or science centre, you could try making this simple spectroscope. The spectroscope will create a rainbow (and you can never have enough of those), and can be used to explain the wavelengths that inspired us to choose the 5th of July as the date to celebrate LGBTSTEMDay.

To make one, you'll need a CD, a cardboard tube (the paper towel kind), some pieces of cardboard, some tape, and a craft knife or scissors. To make it, you can follow this guide by Exploratorium -

<https://www.exploratorium.edu/snacks/cd-spectroscope>

Charity Coffee morning

To mark the first LGBTSTEMDay in 2018, lots of offices, workplaces, departments and labs held a coffee morning, that brought people together for a cup of coffee (or tea, if that's your thing) and some delicious baked goods. The simple act of marking LGBTSTEMDay with a friendly get-together can be a message of support to LGBTQ peers and colleagues.

All you need to organise a coffee morning is a space to gather, and some people who are happy to bring along some tea, coffee, buns and cakes. If you're using your coffee morning to collect money for charity, we recommend that you choose a charity that supports vulnerable LGBTQ people.

Journal club

Many research groups have regular journal clubs, where everyone reads a particular paper, and usually one member of the team leads a discussion on it. For LGBTSTEMDay, consider discussing a paper on the experiences of LGBTQ people in STEM or academia.

Here are some papers we suggest:

- Science Advances | Coming out in STEM: Factors affecting retention of sexual minority STEM students. Bryce E. Hughes, 14 March 2018 | <http://advances.sciencemag.org/content/4/3/eaao6373.full>
- Social Sciences | Queer in STEM Organizations: Workplace Disadvantages for LGBT Employees in STEM Related Federal Agencies. Cech and Pham, 2017 | <https://www.mdpi.com/2076-0760/6/1/12/htm>
- Journal of Homosexuality | Queer in STEM: Workplace Experiences Reported in a
- National Survey of LGBTQA Individuals in Science, Technology, Engineering, and Mathematics Careers. Yoder and Mattheis, 2016 | <https://drive.google.com/file/d/0B8WTovkBDKYWYWQtamF0UXkzTU0/view>
- Journal of Women and Minorities in Science and Engineering | Factors impacting the academic climate for LGBTQ STEM faculty. Patridge et al., 2014 | <http://www.dl.begellhouse.com/journals/00551c876cc2f027.761a7b37493b2d86.6fe4cda94f55abdf.html>
- CBE—Life Sciences Education | Coming Out in Class: Challenges and Benefits of Active Learning in a Biology Classroom for LGBTQIA Students. Cooper and Brownell, 2016 | <https://www.ncbi.nlm.nih.gov/pubmed/27543636>
- Engineering Studies | Navigating the heteronormativity of engineering: the experiences of lesbian, gay, and bisexual students. Erin A. Cech & Tom J. Waidzunus, Vol. 3, Iss. 1, 2011 | <http://www.tandfonline.com/doi/abs/10.1080/19378629.2010.545065>
- There are also lots of articles and essays, including those collected by:
 - House of STEM: <https://houseofstem.org/reading/>
 - LGBTSTEM: <https://lgbtstem.wordpress.com/lgbt-stem-in-the-media/>

Queer Science Fiction Book club

LGBTSTEMDay might be a good opportunity to start a book club with some queer science friends, perhaps centred around queer science fiction. Here's a list of potential books people suggested in a recent Twitter call-out: <https://twitter.com/shaunoboyle/status/1107387167809130496>

Autonomous by Annalee Newitz
The Man Who Folded Himself by David Gerrold
Paul Takes the Form of a Mortal Girl by Andrea Lawlor
Mysterious Skin by Scott Heim
An Unkindness of Ghosts by Rivers Solomon
Ammonite by Nicola Griffith
The Female Man by Joanna Russ
The Red Threads of Fortune by JY Yang
The Long Way to a Small Angry Planet by Becky Chambers
Swordspoint by Ellen Kushner
Planetfall by Emma Newman
THIRDS series by Charlie Cochet
Louis & Louise by Julie Cohen
Luck in the Shadows by Lynn Flewelling
Magic's Pawn by Mercedes Lackey
Queers Destroy Science Fiction (Anthology)
Not Your Sidekick by C.B. Lee
The Broken Earth Trilogy by NK Jemisin
The Left Hand of Darkness by Ursula K. Le Guin
Long Way To A Small Angry Planet by Ursula K. Le Guin
Saucy Jack & the Space Vixens by Charlotte Mann
SAGA by Vaughan and Staples
XX by Angela Chadwick
Slow River by Nicola Griffin
The Ultra Fabulous Glitter Squadron Saves The World Again by AC Wise
The Murderbot Diaries by Martha Wells
China Mountain Zhang by Maureen F. McHugh
An Excess Male by Maggie Shen King
The Unintentional Time Traveller by Everett Maroon
Ascension by Jacqueline Koyangi
Perelandra by CS Lewis
Passing Strange by Ellen Klages
Sing for the Coming of the Longest Night by Katherine Fabien
Sorcerer of the Wildeeps\A Taste of Honey by Kai Ashante Wilson
The Salt Roads by Nalo Hopkinson
Space Opera by Catherynne Valente
Babel-17 by Samuel R Delany
Witchmark by CL Polk
The Ultra Fabulous Glitter Squadron by AC Wise
No Man of Woman Born (collection) by Ana Mardoll
The Picture of Dorian Gray by Oscar Wilde
Every Day (series) by David Levithan
Borderline by Mishell Baker

Supernova by Dee Lestari
The Machineries of Empire by Yoon-Ha Lee
Ancillary Justice by Ann Leckie
The Stars are Legion by Kameron Hurley
Shadow Man by Melissa Scott
Commitment Hour by James Alan Gardner
Long Way to a Small Angry Planet by Becky Chambers
The Left Hand of Darkness by Ursula le Guin
The Imperial Radsch Trilogy by Anne Leckie
Hominids by Robert J. Sawyer
Blackfish City by Sam J Miller

Screening of How to Survive a Plague

The 2012 documentary film, 'How to Survive a Plague', is an important story about the AIDS epidemic in America, LGBTQ activism and science activism.

You will need to contact the distributor about any screenings of the film. Below is the contact information.

Educational and semi-theatrical rights: Allie Silvestri - allie@rocofilms.com
Screenings outside of the US and Canada: Tarji Rodriguez - tarji@rocofilms.com
UK: Matt Hird - matt@dartmouthfilms.com
USA/Canada: Marie Zeniter - Marie.Zeniter@ifcfilms.com

Public performance and educational screening licenses are available from the site Simple Cinema here: http://www.simplecinemafilms.com/how_to_survive_a_plague

A Non-commercial Public Performance License for Non-Profit Organizations and Small Community Groups is \$150 USD for one public performance screening of the film where admission is not paid.

And so much more...

LGBTSTEMDay is your day, and we want you to organise the best event for your local community. Keep it diverse and inclusive, and let your creativity run wild. Here are some suggestions to get you thinking...

An LGBTSTEMDay cabaret, that mixes science talks, music, dance and performance.

A pop-up exhibition of research images, celebrating LGBTQ scientists and the work they do.

An LGBTSTEMDay pot luck, where LGBTQ scientists and engineers get together for some food and conversation.

An LGBTSTEMDay hackathon where engineers, makers, designers, and crafters get together to make things and solve problems as a team.

An improv night, combining comedy and science and featuring LGBTQ STEM folks.

A panel discussion, exploring the experiences of LGBTQ people in STEM from different perspectives.

A zine-making workshop, to create one-of-a-kind zines that mark LGBTSTEMDay.

A listening event, where you curate and gather an audience to listen to radio and podcast pieces (be sure to consider a sign language interpreter for this one)

A talk by an LGBTQ scientist, or by someone from your local LGBTSTEM group.

An LGBTSTEMDay unconference, where the agenda is decided at beginning of conference by participants

LGBTSTEMDay lightning talks, a series of 5 or 10 minute talks.

Science demos in an LGBTQ space.

Appendix I: Suggested Code of Conduct

This LGBTSTEMDay event aims to ensure we offer a harassment-free conference experience for everyone, regardless of race, gender, gender identity and expression, sexual orientation, disability, physical appearance, body size, or religion. We cannot tolerate harassment of event participants in any form. Event participants violating these rules may be sanctioned or expelled from the conference at the discretion of the organisers.

Harassment includes offensive verbal comments related to race, gender, gender identity and expression, sexual orientation, disability, physical appearance, body size, religion, sexual images in public spaces, deliberate intimidation, stalking, following, sustained disruption of talks or other events, inappropriate physical contact, and unwelcome sexual attention. Participants asked to stop any harassing behavior are expected to comply immediately.

If a participant engages in harassing behavior, the event organisers reserve the right to take any action they deem appropriate, including warning the offender or expulsion from the event. If you are being harassed, notice that someone else is being harassed, or have any other concerns, please contact one of the event organisers.

A member of the organising team will be happy to help participants contact security, provide escorts, or otherwise assist those experiencing harassment to feel safe for the duration of the event.

We expect participants to follow these rules at all LGBTSTEMDay-related events.

Adapted from the Inspirefest Code of Conduct: <https://inspirefest.com/code-of-conduct/>

Appendix II: Wikipedia Edit-a-thon resources

Queer in STEM survey

- Interview with authors of the study (Jeremy Yoder and Allison Mattheis) in Wired about how it all came about: <https://www.wired.com/2016/07/queer-stem-anybody/>
- Queer in STEM project website: <http://www.queerstem.org/>
- Official link to paper in the Journal of Homosexuality (paywall): <https://www.tandfonline.com/doi/abs/10.1080/00918369.2015.1078632?journalCode=wjhm20>

- Direct link to a pdf of the paper:
<https://drive.google.com/file/d/0B8WTovkBDKYWYWQtamF0UXkzTU0/view>
- Interview in Scientific American with one of the scientists taking over the next phase of the study, Joey Nelson: <https://blogs.scientificamerican.com/voices/whats-it-like-to-be-queer-in-stem/>

Profiles of LGBTQ+ scientists

- 500 Queer Scientists: <https://www.500queerscientists.com/>
- Advocate article on 500QS, including selected profiles:
<https://www.advocate.com/people/2018/7/19/500-queer-scientists-make-your-day-smarter#media-gallery-media-0>
- LGBTSTEM interviews: <https://lgbtstem.wordpress.com/interviews/>
- Pink News piece on historical LGBTQ scientists:
<https://www.pinknews.co.uk/2018/07/05/queer-scientists-history-first-lgbtstemday/>

Articles about LGBTSTEMDay

- Shaun O'Boyle for Silicon Republic on the origins of House of STEM and LGBTSTEMday:
<https://www.siliconrepublic.com/innovation/house-of-stem-lgbtq-pride-inspirefest>
- Blog post about LGBTSTEMDay at the Babraham Institute:
<https://womeninsciencepastpresentfuture.wordpress.com/2018/07/13/the-first-international-lgbt-stem-day/>

Articles written by or interviewing named LGBTQ+ scientists

- Spokes article on the role of science centres and museums on LGBTQ+ diversity in STEM:
<https://www.ecsite.eu/activities-and-services/news-and-publications/digital-spokes/issue-32#section=section-lookout&href=/feature/lookout/rainbow-science>
- Guardian article by Tom Welton on being a gay scientist:
<https://www.theguardian.com/science/2014/feb/14/gay-prejudice-coming-out-scientist-lgbt>
- Boston University post that explores lack of data and mentions lots of LGBTQ people in STEM:
<http://www.bu.edu/research/articles/lgbt-issues-stem-diversity/>
- Nature article on not being out, including interviews with LGBTQ scientists:
<https://www.nature.com/news/diversity-pride-in-science-1.15924>
- Nature Jobs piece that interviews LGBTQ scientists:
<https://www.nature.com/naturejobs/science/articles/10.1038/nj7482-249a>
- Alfredo Carpineti on LGBTQ role models in education:
<https://www.governmenteuropa.eu/pride-in-stem-education/85046/>
- BMC piece on LGBTQ and field work:
<http://blogs.biomedcentral.com/bmcblog/2017/06/28/being-queer-in-the-jungle-the-unique-challenges-of-lgbtq-scientists-working-in-the-field/>
- Shaun O'Boyle for Silicon Republic on challenges that face LGBTQ scientists:
<https://www.siliconrepublic.com/innovation/lgbtq-house-of-stem>
- Niamh Kavanagh for the Irish Research Council on LGBTQ in STEM workplaces:
<http://research.ie/what-we-do/loveirishresearch/blog/loveirishresearch-blog-lets-work-it-out/>
- Ive Velikova for Sister STEM on being a queer scientist:
<https://sisterstem.org/2018/07/24/on-being-queer-in-stem/>
- Peter Coles on his own blog about being out in Astrophysics:
<https://telescopers.wordpress.com/2018/07/13/my-time-out-in-astronomy/>

Articles exploring issues around being LGBTQ in STEM

- Guardian article on the absence of LGBTQ people from many diversity in science initiatives:
<https://www.theguardian.com/science/political-science/2015/jun/29/queer-laboratory-life-recognising-the-work-of-lgbt-scientists>

Research articles

- 2018 Science Advances paper on the retention of LGB STEM students:
<http://advances.sciencemag.org/content/4/3/eaao6373.full>
- 2017 Social Sciences paper on workplace disadvantages for LGBT people in STEM:
<https://twitter.com/BMatB/status/1091744916487716867>
- 2010 Engineering Studies paper on heteronormativity in engineering:
<https://www.tandfonline.com/doi/abs/10.1080/19378629.2010.545065>

There are lots more links here, collected by LGBTSTEM:

- <https://lgbtstem.wordpress.com/lgbt-stem-in-the-media/>

Wikipedia articles on LGBT+ scientists that need updating/expanding

- Peter Coles (https://en.wikipedia.org/wiki/Peter_Coles) last updated Dec 2017
- A.W. Peet (https://en.wikipedia.org/wiki/A.W._Peet) - notability contended, updating may help preserve this articles
- Jessica Ware (https://en.wikipedia.org/wiki/Jessica_Ware) last added content in 2017
- Jessica Mink (https://en.wikipedia.org/wiki/Jessica_Mink) could use some serious cleaning up and expansion, look at other Wiki pages for inspiration
- Tom Welton (https://en.wikipedia.org/wiki/Thomas_Welton) last updated Dec 2017
- David K. Smith (https://en.wikipedia.org/wiki/David_K._Smith) could use a bit expanding
- Katie Mack ([https://en.wikipedia.org/wiki/Katie_Mack_\(astrophysicist\)](https://en.wikipedia.org/wiki/Katie_Mack_(astrophysicist))) could use cleaning up (dividing the intro into paragraphs), also her outreach works should be added
- Renée Hložek (https://en.wikipedia.org/wiki/Ren%C3%A9e_Hlo%C5%BEek) could add a bit on outreach, also last updated June 2018
- Ron Buckmire (https://en.wikipedia.org/wiki/Ron_Buckmire) mathematician and dean from Granada, needs paragraphs and infobox
- Sally Le Page (https://en.wikipedia.org/wiki/Sally_Le_Page) still says she's a PhD student, but she has graduated, so could use some updating
- Kate Hutton (https://en.wikipedia.org/wiki/Kate_Hutton) needs organising/cleaning up and some expanding
- Edith Perez (https://en.wikipedia.org/wiki/Edith_A._Perez) last updated over a year ago, needs paragraphs.
- Martin Lo (https://en.wikipedia.org/wiki/Martin_Lo) needs some serious updating
- Angela Clayton (https://en.wikipedia.org/wiki/Angela_Clayton), written as a list rather than a biography

Wikipedia articles on LGBT+ people in tech that need updating/expanding

- Arlan Hamilton (https://en.wikipedia.org/wiki/Arlan_Hamilton)

LGBT+ scientists with articles in other languages

- David Adger (Hungarian: https://hu.wikipedia.org/wiki/David_Adger; Scottish Gaelic: https://gd.wikipedia.org/wiki/David_Adger) - Professor of Linguistics at Queen Mary University of London
- Javier Armentia Fructuoso (Spanish: https://es.wikipedia.org/wiki/Javier_Armentia) - Astrophysicist, director of the Planetarium of Pamplona

LGBT+ scientists who don't have a Wikipedia page

- Tristram Wyatt - emeritus fellow in zoology at Oxford
Good overview of work: <https://www.zoo.ox.ac.uk/people/dr-tristram-wyatt>
TED talk: https://www.ted.com/talks/tristram_wyatt_the_smelly_mystery_of_the_human_pheromone/
- Cynthia Bauerle - Dean of the College of Science and Mathematics at James Madison University
Interview: <http://www.jmu.edu/news/2016/09/15-new-csm-dean.shtml>

- Rochelle Diamond - lab manager at CalTech and chair of the NOGLSTP
Everipedia with many links: https://everipedia.org/wiki/lang_en/rochelle-diamond/
In-depth interview: <https://www.autostraddle.com/queered-science-rochelle-diamond-and-noglstp-202283/>
- Kaki Flynn - explorer and scientist
News article with overview of her accomplishments: <https://www.news4jax.com/tech/jacksonville-resident-named-to-white-house-lgbtq-tech-innovation-summit>
- Jesus Ramirez-Valles - professor of Community Health Sciences and writer
Biography: <https://today.uic.edu/experts/jesus-ramirez-valles>
- (Theodore) Neil Divine - Astrophysicist
Short biography: <http://andrejkoymasky.com/liv/fam/biod2/divine02.html>
There's an in memoriam by Jeffrey A. Nunes, but it's requires access. I can provide it to whoever would like to write about him
- Donna Riley - Engineer
In-depth interview: <https://www.autostraddle.com/queered-science-interview-dr-donna-riley-and-engineering-social-justice-200233/>
- Jeremy Yoder - Assistant professor in Biology, co-author of Queer in STEM survey
Interview: <https://www.autostraddle.com/queered-science-jeremy-yoder-allison-mattheis-and-surveying-queers-in-stem-200257/>
More on the survey: <http://www.queerstem.org/search/label/media>
- Allison Mattheis - Associate professor in Applied and Advanced Studies in Education co-author of Queer in STEM survey
<https://www.autostraddle.com/queered-science-jeremy-yoder-allison-mattheis-and-surveying-queers-in-stem-200257/>
More on the survey: <http://www.queerstem.org/search/label/media>
- Walt Westman - founder of the NOSGLSTP and ecologist, topic of the Walt Westman papers
About his life and role in NOSGLSTP: <https://www.noglstp.org/programs-projects/recognition-awards/about-walt-westman/>

LGBT+ people in tech who don't have a Wikipedia page

- Ana Arriola - product designer at Microsoft
 - <https://blog.techinclusion.co/put-your-squirrel-suit-n-and-jump-off-the-cliff-7d13837b277c>
 - <https://techiesproject.com/ana-arriola/>
 - Sara Sperling - Former Facebook head of diversity
 - <https://www.adweek.com/digital/qa-with-sara-sperling-facebooks-head-of-diversity/>
 - <https://www.recode.net/2015/2/27/11559554/snapchat-hr-director-sara-sperling-departs-after-six-months>
 - Ann Mei Chang - Author and former USAID Chief Innovation Officer
<https://medium.com/airbel/ann-mei-changs-innovation-playbook-for-the-development-sector-cfb90d1a7eb1>
 - Claudia Brind-Woody - IBM Executive
 - <https://www.businessinsider.com/ibm-vp-claudia-brind-woody-lgbt-diversity-policies-procedures-advocacy-and-impact-2016-10?r=US&IR=T>
 - <https://www.ibm.com/blogs/jobs/2018/01/31/ibm-executive-claudia-brind-woody-on-the-value-of-playing-a-team-game-being-authentic-and-bringing-your-whole-self-to-work/>
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