

Frank Kameny the astronomer

The famed gay rights leader and accomplished scientist was one of thousands of US government employees who lost their livelihoods during the Lavender Scare.

The space race was a time of remarkable innovation and progress in US space science and exploration. Yet, even as the federal government was pouring money and resources into the natural sciences, it was also pushing out scientists, engineers, and other government employees that it deemed unfit. During the Lavender Scare of the mid 20th century, the US dismissed thousands of LGBTQ+ public servants, robbing them of their careers and their legacies.

One of them was Frank Kameny, often referred to as the grandfather of the gay rights movement. He became an activist after he was fired from his job as an astronomer at the Army Map Service.

Despite Kameny's renown in the gay rights movement, his work in astronomy is relatively unknown. In addition to previous interviews and biographical accounts, his papers in the Library of Congress offer perspective on his astronomical achievements. The story of Kameny and the science he only briefly got to pursue is a reminder of the importance of spotlighting those who were denied the opportunity to leave a mark on their fields.

An “unwavering” pursuit of astronomy

Franklin Edward Kameny was born on 21 May 1925 in Queens, New York, to a middle-class Jewish family. By age 4, Kameny knew he wanted to be a scientist, and by 7, he had decided on astronomy. He frequently visited the local planetarium and studied the night sky with his telescope, and he founded his high school's astronomy club.

In 1943, Kameny paused his physics studies at Queens College to enlist in the US Army Specialized Training Program, through which he studied mechanical engineering for a technical role in the military. But the program was soon cut, and Kameny went on to serve as a mortar crewman in Europe. After returning to Queens College, he received his bache-



FRANK KAMENY in 1948. (Photo from the Library of Congress.)

lor's degree in physics in 1948 and left for Harvard University to pursue a doctorate. “My ambition to become an astronomer remained unwavering,” he wrote in an unpublished memoir.

As a PhD student, Kameny dove into photoelectric photometry, an emerging field spurred by the new commercial availability of photomultiplier tubes. With their increased sensitivity compared with photographic plates, the tubes could detect photons from lower-flux astronomical objects and convert them into electric signals. For his thesis, Kameny measured the light curves of RV Tauri and yellow semiregular variable stars. His adviser, Cecilia Payne-Gaposchkin, was among the many prominent astronomers whom Kameny worked with during his time studying in Massachusetts, Arizona, and Northern Ireland.

Kameny also served as manager of George R. Agassiz Station, a Harvard

observatory located about 50 kilometers west of the university. There, he and fellow student Harlan James Smith improved the high-vacuum aluminization process, a method for coating telescopic mirrors. They realized that if they depressurized the aluminizing chamber using vacuum equipment, a thin film of aluminum would coat the glass substrate evenly—a process known as vacuum metallization. After aluminizing the observatory's 61-inch reflector, they wrote an authoritative 171-page manual on the technique.

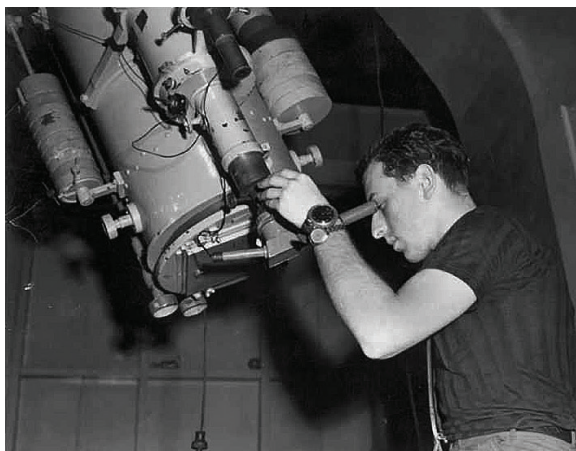
Lavender Scare

By the time Kameny had completed his doctoral thesis in 1956, he had realized his sexuality and dived into the underground gay scene: “I took to it like a duck to water,” he said in the 1972 book *The Gay Crusaders*, “as if it were made for me or I for it!” At the time, sodomy was a crime in all 50 states and the

District of Columbia, and sodomy laws were used by authorities to arrest those deemed to be gay.

On 28 August 1956, after attending the closing banquet of an American Astronomical Society conference in Berkeley, California, Kameny traveled to San Francisco. That night, another man followed Kameny into a train station restroom—a popular gay cruising site—and “touched the private parts” of Kameny for some five seconds. Unbeknownst to them, the San Francisco Police Department had been observing Kameny for a half hour. Upon leaving, Kameny was arrested and charged with “lewd and indecent conduct.” Kameny later recounted in a letter to a gay rights advocacy group that the engagement was nonconsensual.

Because it was a minor charge, Kameny thought little of it and continued with his life. He was entering the workforce at a time when the US was competing with the USSR to launch the first satellite, and there were ample job opportunities for space scientists. Kameny relocated to Washington, DC, where he became a research associate at the Georgetown College Observatory and continued his work on photoelectric photometry. In 1957, Kameny took a job with the Army



KAMENY USES A TELESCOPE, most likely during his time as a Harvard graduate student, in an undated photo. (Photo from the Library of Congress.)

Map Service, where he supervised observing teams and assembled photoelectric observations of stellar occultations. His sky surveys would be used to determine precise distances between locations and to help guide missiles.

But on 24 October 1957, just 20 days after the Soviet launch of *Sputnik 1* sparked new urgency in the US space program, Kameny's career came crashing down. While conducting research in Hawaii, he received a summons from the Army Map Service. The federal government had learned of his 1956 arrest. Kameny was fired in December and, a

month later, had his security clearance revoked.

During that time, LGBTQ+ individuals were broadly regarded as mentally ill and subject to blackmail, making them a security risk in the eyes of a government obsessed with preventing alleged subversion by communists. Following President Dwight Eisenhower's 1953 Executive Order 10450 explicitly barring people engaging in “sexual perversion” from federal employment, the Civil Service Commission began systematically dismissing government employees who were suspected to be gay.

Kameny was one of an estimated 5000–10 000 people who lost their jobs during a period that historian David K. Johnson termed the Lavender Scare. And, according to Johnson, because the federal government was becoming the leading employer of scientists and engineers, scientists were disproportionately targeted and impacted. Others dismissed include Benning Wentworth, a technical aide who held a security clearance at Bell Labs, and Clifford Norton, a budget analyst at NASA.

In the aftermath, Kameny struggled to find work in astronomy. Although scientists and other professionals praised his qualifications, including his “outstanding background and accomplishments,” Kameny was rejected from institutions such as Johns Hopkins University and MIT. He managed to find temporary, menial jobs at optics laboratories and companies. Even as the government and its contractors were scrambling to reinforce the nation's scientific workforce to win the space race, they refused to hire Kameny because he was gay.

Activism and advocacy

Rather than accepting the dismissal, Kameny fought the decision, becoming the first of those who were fired to challenge the government directly. Incensed by the loss of his scientific career, Kameny wrote to Eisenhower: “I have been directing my efforts for over 25 years—since childhood—toward making Astronomy my profession. The Civil Service Commission's action, if allowed to stand, will completely end my professional and scientific career.” He ultimately appealed his case to the Supreme

have been to no avail, either in having the Commission's action altered, or in having presented to me the particulars of the immoral acts which I am alleged to have committed.

I have been directing my efforts for over 25 years -- since childhood --- toward making Astronomy my profession. The Civil Service Commission's action, if allowed to stand, will completely end my professional ~~xxxxxx~~ and scientific career. In a period when scientists are in such great demand, and so much attention is being given to means and ~~xxxx~~ attempts to increase their number, when Astronomers are so badly needed (there are only approximately 200 active professional Astronomers in the United States), it seems to be to no one's benefit to utterly and permanently destroy one Astronomer, as would indeed be the case were news of this dismissal to be known in this small, family-like profession, wherein almost every member is personally acquainted with every other member.

It seems hardly consistent with the most basic American principles of justice and equity.

AN EXCERPT FROM KAMENY'S LETTER to President Dwight Eisenhower, circa 1958. (Image from the Library of Congress.)



KAMENY IS HONORED at the White House in 2009. (Photo by Pete Souza/White House.)

Court in 1960. Unable to find legal representation, Kameny drafted a 64-page petition requesting that the court hear his case. It refused to do so.

Nonetheless, Kameny continued his work advocating for gay rights and social justice. He led the Mattachine Society of Washington, DC, organized the first gay rights picket at the White House in 1965, petitioned Congress, and educated people across the country. When Wentworth, Norton, and others sought Kameny's help in regaining their security clearances, he served as their *de facto* lawyer in court. He eventually won pivotal cases, including the ones for Went-

worth and Norton, and paved the way for broader inclusion of the LGBTQ+ community in government positions.

In 1969, Kameny turned his attention fully to advocacy. In 1971, he became the first openly gay candidate to run for Congress. The next year, he helped force the American Psychiatric Association to hold a panel at its annual meeting to discuss the classification of homosexuality as a mental illness. At the panel, he and other gay rights activists rebutted its classification, and at a later special session on homosexuality, Kameny served as the chief discussant. His actions played a pivotal role both in the associa-

tion's 1973 decision to declassify homosexuality as a disorder and in the Civil Service Commission's reversal of Eisenhower's executive order two years later.

Until his death in 2011—on 11 October, National Coming Out Day—Kameny continued to influence public policy and advocate for equal rights. He became involved with local politics: serving on Washington, DC's Human Rights Commission, assisting in the repeal of the district's sodomy law, and becoming a staunch advocate for DC statehood.

Although progress has been made in the nearly 70 years since Kameny's dismissal from the Army Map Service, LGBTQ+ physicists today say they often feel excluded by the physics community (see "To retain and inspire LGBT+ physicists, welcome them," *PHYSICS TODAY* online, 2 June 2022). In a 2022 survey of 324 LGBTQ+ physicists, 36% had considered leaving their workplace in the previous year because of unwelcoming environments, and 22% reported experiencing discrimination firsthand. The discrimination figure reached 49% for transgender physicists.

As a community, physicists continue to fail their LGBTQ+ colleagues. Only by improving the communities we inhabit, particularly for those of marginalized backgrounds, can physics excel.

Kai Hostetter-Habib

A reference list can be found at <https://physicstoday.org/kameny>.

Q&A: Physicist Karen Hallberg is the new Pugwash secretary general

The organization relies on science diplomacy in seeking solutions to global threats.

In a time of nuclear escalation, including Russia hinting it might use nuclear weapons, says Karen Hallberg, "the situation is much riskier than anytime during the Cold War, except maybe the Cuban missile crisis." The threshold of nuclear confrontation is at an all-time low, says the theoretical physicist at the Balseiro Institute in San Carlos de Bariloche, Argentina. "The Doomsday Clock of the *Bulletin of the Atomic Scientists* is

closer to midnight than ever. The situation is horrible." But, she continues, "There is so little public awareness. It's not on anyone's agenda."

It's certainly on hers. On 1 January, Hallberg took the mantle as secretary general of the Pugwash Conferences on Science and World Affairs. Established in 1957, Pugwash is focused on the elimination of weapons of mass destruction through science diplomacy. The organi-

zation shared the Nobel Peace Prize in 1995 with its cofounder Joseph Rotblat.

Hallberg previously served for two decades on the organization's governing board, the Pugwash Council. In her new role in the top leadership, she is responsible for organizing Pugwash activities and overseeing the group's international offices, financial transactions, and official correspondence. She works closely with Pugwash president Hussain Al-Shahristani. The nuclear chemist, she notes, was imprisoned in Abu Ghraib for 11 years because he refused to collaborate on a nuclear weapon for Iraq. His "courageous stance against nuclear weapons and his scientific approach to policymaking represent the core values of the Pugwash Conferences," says Hallberg.