

# Committee on Science Priorities (CSP) report

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IVOA Committee on Science Priorities (CSP)

<http://wiki.ivoa.net/twiki/bin/view/IVOA/IvoaSciencePriorities>

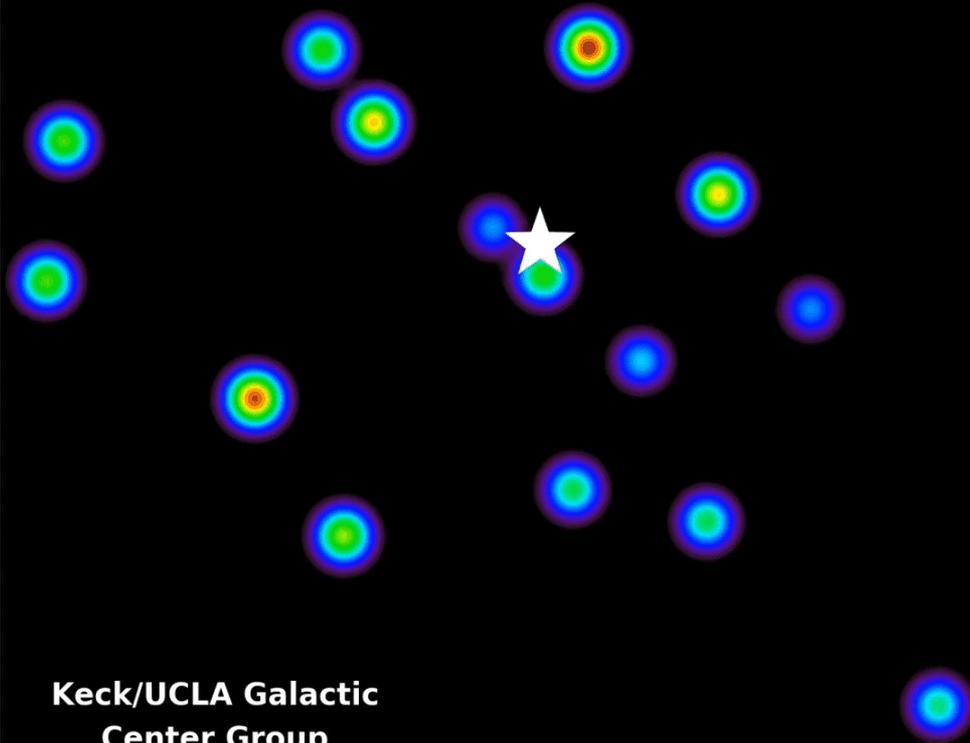
ESAC Science Data Centre (ESA), Madrid, Spain

IVOA virtual Interop, 17 Nov 2020

# Another Nobel prize to Astronomy in 2020: Sgr A\*



1995.6



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1. Motivation
2. Scientific priorities
  1. Currently identified
  2. Upcoming
3. Re-fueling the CSP

# Current scientific priorities at IVOA



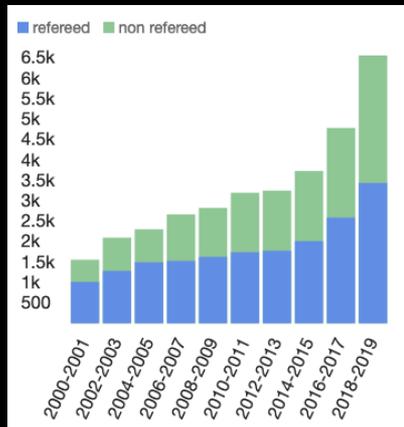
- **Time-domain astronomy:** TIMESYS (light curves) and ST-MOC (discovery). -> Handling of alerts? GW triggers?
- **Multi-dimensional data:** spectral or time cubes (sky + wavelength/frequency or sky + time)
- **Upcoming priorities:**
  - **Python reference implementations** prioritized for major services (now with pyVo and better coordination with astropy)
  - Ways for accessing **large amounts of data** from future surveys? (Science platforms session this interop)
  - Other growing areas/priorities?



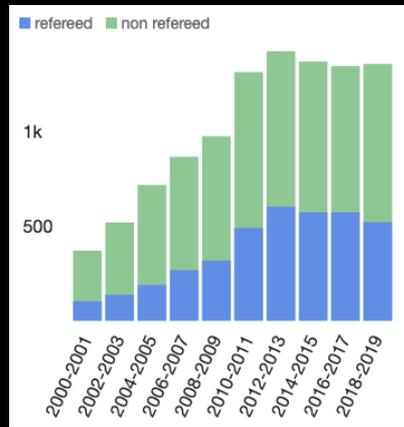
# Upcoming scientific priorities for the IVOA



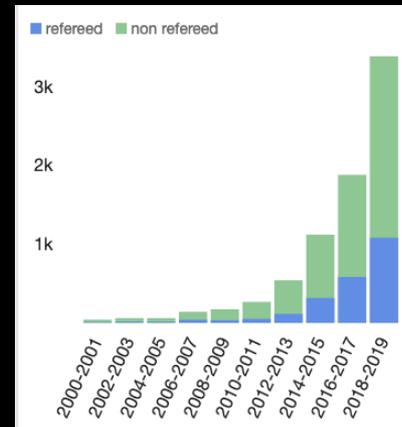
## Gravitational waves



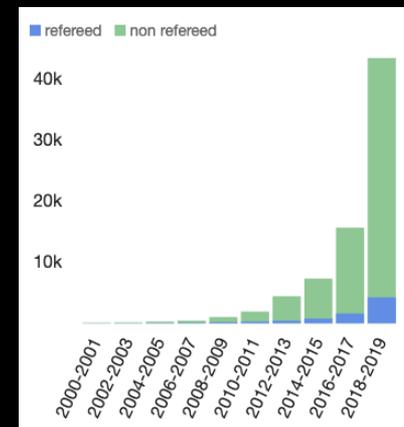
## Multi-wavelength



## Python



## Machine learning\*



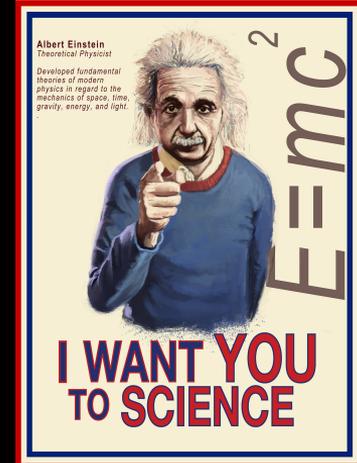
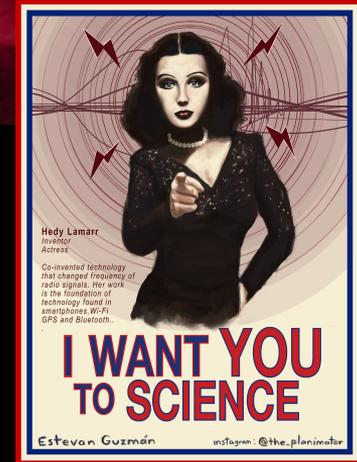
ADS-listed articles containing those keywords as a function of time

\* Possibly biased by size of other scientific fields



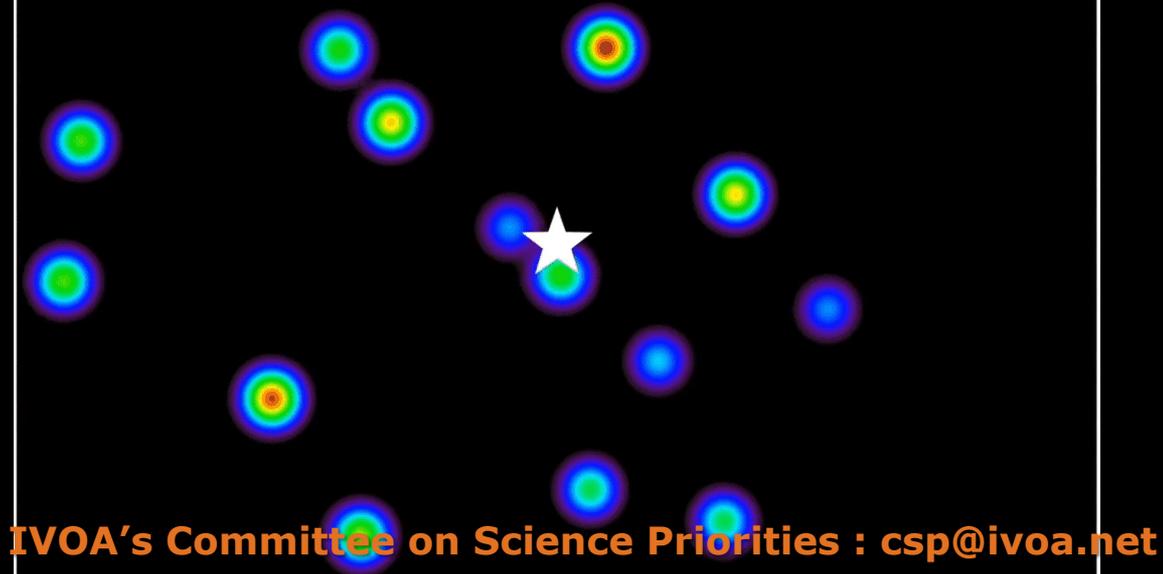
# Refueling the CSP

- **New charter**
  - Proactively liaising with large upcoming projects
  - Involving active scientists in and out of the VO
  - Champions: individuals pushing for specific scientific use-cases (what do you want?)
- **Updated Twiki page**
  - With no acronyms
  - Easy to understand how to engage/contribute
- **Interested? Please talk to me !**



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# Thanks!



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