ASTR578 Assignment 1: Topic Selection
Due Jan 16 2025 through D2L
select category and up to 4 key words

Appendix B: Science Keywords

Keywords to be used in APT when submitting a proposal.

The Tables in this Appendix list the Scientific Keywords that are valid for use in the proposal template.

Within a panel, proposals are assigned to individual reviewers based on the reviewers' expertise and based partly on the keywords given in the proposal and partly on analysis of the proposal text. Generally, the more keywords the proposer selects the better the match to reviewers' expertise. Proposals can designate both a Science Category and an Alternate Category. Designating an Alternate Category enables usage of keywords from multiple categories. The Science Policy Division at STScI reserves the right to re-classify proposals.

For additional information on the proposal sorting into each panel, see HST Proposal Selection Procedures. The HST Scientific Categories and Keywords were developed using the Unified Astronomy Thesaurus beginning in Cycle 28.

Solar System Astronomy:
Asteroids
Astronomical models
Astronomical simulations
Atmospheric composition
Atmospheric variability
Binary systems / Multiple systems
Biomarkers

Exoplanets and Exoplanet Formation:
Astronomical models
Astronomical simulations
Biomarkers
Brown Dwarfs
Chemical composition
Circumstellar disks
Circumstellar dust

Solar System Astronomy:
Centaurs
Chemical composition
Comets
Inner planets
Irregular satellites
Main belt asteroids
Minor planets
Natural satellites
Near-Earth objects
Occultation
Orbits
Outer planets
Planetary atmospheres
Planetary rings
Planetary surfaces
Small solar system bodies
Space weather
Surface composition
Surface ices
Surface processes
Surface variability
Trans-Neptunian objects
Transits
Trojan asteroids
Zodiacal cloud

Exoplanets and Exoplanet Formation:
Circumstellar gas
Debris disks
Exoplanet atmospheres
Exoplanet atmospheric composition
Exoplanet atmospheric variability
Exoplanet detection methods
Exoplanet dynamics
Exoplanet structure
Exoplanet surfaces
Exoplanet systems
Extrasolar gaseous giant planets
Extrasolar ice giants
Extrasolar rocky planets
Extrasolar sub-Neptunes
Free floating planets
High contrast techniques
Natural satellites (Extrasolar)
Planet hosting stars
Protoplanetary disks (Extrasolar)
Radial velocity
Space weather
Stellar accretion disks
Transits
White dwarf stars

Navigation

Stellar Physics and Stellar Types:
Astrometry
Astronomical models
Astronomical simulations
Binary stars / Trinary stars
Black holes
Brown dwarfs
Circumstellar disks
Circumstellar matter
Cosmological parameters
Cosmology
Early-type stars
Evolved stars
Gamma-ray bursts
Gravitational wave sources
H II regions
High contrast techniques
Hubble constant
Interacting binary stars
Intermediate-type stars
Interstellar dust
Interstellar medium
Late-type stars
Low mass stars
Main sequence stars
Massive stars

Stellar Populations and the Interstellar Medium:
Astrochemistry
Astrometry
Astronomical models
Astronomical simulations
Chemical abundances
Cosmological parameters
Cosmology
Dwarf galaxies
Early-type stars
Elliptical galaxies
Galactic center
Galaxy bulges
Galaxy evolution
Galaxy halos
Galaxy spheroids
Globular star clusters
Gravitational microlensing
H II regions
Hertzsprung Russell diagram
High-mass star formation
Hubble constant
Initial mass function
Intermediate-type stars
Interstellar atomic gas
Interstellar dust

Navigation

Stellar Physics and Stellar Types:
Neutron stars
Planetary nebulae
Pre-main sequence stars
Pulsars
Radiative transfer
Stellar abundances
Stellar accretion disks
Stellar atmospheres
Stellar distance
Stellar evolution
Stellar jets
Stellar mergers
Stellar phenomena
Stellar structures
Supernovae
Transient sources
Variable stars
White dwarf stars
Young stellar objects

Galaxies:
Astronomical models
Astronomical simulations
Balmer break
Chemical abundances

Stellar Populations and the Interstellar Medium:
Interstellar medium
Irregular galaxies
Late-type stars
Local Group
Low metallicity stars
Low-mass star formation
Magellanic Clouds
Molecular clouds
Molecular gas
Open star clusters
Planetary nebulae
Polycyclic aromatic hydrocarbons
Population I stars
Population II stars
Population III stars
Red giant tip
Resolved stellar populations
Star clusters
Star formation
Star formation histories
Stellar distance
Stellar kinematics
Stellar population synthesis
Young stellar objects

Navigation

Galaxies:
Cosmic infrared background
Cosmic noon
Cosmological parameters
Cosmology
Dark energy
Dark matter distribution
Disk galaxies
Dwarf galaxies
Elliptical galaxies
Emission line galaxies
Extragalactic legacy and deep fields
Galaxy bulges
Galaxy clusters
Galaxy dark matter halos
Galaxy disks
Galaxy environments
Galaxy groups
Galaxy kinematics
Galaxy mergers
Galaxy spheroids
Galaxy stellar halos
Galaxy structure
Gravitational lensing
High-redshift galaxies
Hubble constant

Supermassive Black Holes and Active Galaxies:
AGN host galaxies
Astronomical models
Astronomical simulations
Blazars
Broad-absorption line quasar
Emission line galaxies
Galaxy jets
Galaxy winds
High contrast techniques
High-luminosity active galactic nuclei
LINER galaxies
Low-luminosity active galactic nuclei
M-sigma relation
Markarian galaxies
Quasars
Quenched galaxies
Radio cores
Reverberation mapping
Seyfert galaxies
Stellar accretion disks
Stellar feedback
Supermassive black holes
X-ray active galactic nuclei

Navigation

Galaxies:
Interacting galaxies
Interstellar dust
Irregular galaxies
Large-scale structure of the universe
Local Group
Luminous infrared galaxies
Lyman-break galaxies
Magellanic Clouds
Molecular gas
Nearby galaxies
Polycyclic aromatic hydrocarbons
Population III stars
Post-starburst galaxies
Protoclusters
Protogalaxies
Quenched galaxies
Reionization
Scaling relations
Spectral energy distribution
Star clusters
Star formation
Starburst galaxies
Stellar populations
Ultraluminous infrared galaxies

Intergalactic Medium and Circumgalactic Medium:
Astronomical models
Astronomical simulations
Circumgalactic medium
Cooling flows
Damped Lyman-alpha systems
Gunn-Peterson effect
Intergalactic dust clouds
Intergalactic medium
Intracluster medium
Lyman-alpha forest
Metal line absorbers
Reionization
Warm-hot intergalactic medium

Navigation