

List of astronomical key words (Updated on 2020 January)

This list is common to *Monthly Notices of the Royal Astronomical Society*, *Astronomy and Astrophysics*, and *The Astrophysical Journal*. In order to ease the search, the key words are subdivided into broad categories. No more than *six* subcategories altogether should be listed for a paper.

The subcategories in boldface containing the word ‘individual’ are intended for use with specific astronomical objects; these should never be used alone, but always in combination with the most common names for the astronomical objects in question. Note that each object counts as one subcategory within the allowed limit of six.

The parts of the key words in italics are for reference only and should be omitted when the keywords are entered on the manuscript.

General

editorials, notices
errata, addenda
extraterrestrial intelligence
history and philosophy of astronomy
miscellaneous
obituaries, biographies
publications, bibliography
sociology of astronomy
standards

Physical data and processes

acceleration of particles
accretion, accretion discs
asteroseismology
astrobiology
astrochemistry
astroparticle physics
atomic data
atomic processes
black hole physics
chaos
conduction
convection
dense matter
diffusion
dynamo
elementary particles
equation of state
gravitation
gravitational lensing: micro
gravitational lensing: strong
gravitational lensing: weak
gravitational waves
hydrodynamics
instabilities
line: formation
line: identification
line: profiles
magnetic fields
magnetic reconnection
(*magnetohydrodynamics*) MHD
masers
molecular data
molecular processes
neutrinos
nuclear reactions, nucleosynthesis, abundances
opacity
plasmas
polarization

radiation: dynamics
radiation mechanisms: general
radiation mechanisms: non-thermal
radiation mechanisms: thermal
radiative transfer
relativistic processes
scattering
shock waves
solid state: refractory
solid state: volatile
turbulence
waves

Astronomical instrumentation, methods and techniques

atmospheric effects
balloons
instrumentation: adaptive optics
instrumentation: detectors
instrumentation: high angular resolution
instrumentation: interferometers
instrumentation: miscellaneous
instrumentation: photometers
instrumentation: polarimeters
instrumentation: spectrographs
light pollution
methods: analytical
methods: data analysis
methods: laboratory: atomic
methods: laboratory: molecular
methods: laboratory: solid state
methods: miscellaneous
methods: numerical
methods: observational
methods: statistical
site testing
space vehicles
space vehicles: instruments
techniques: high angular resolution
techniques: image processing
techniques: imaging spectroscopy
techniques: interferometric
techniques: miscellaneous
techniques: photometric
techniques: polarimetric
techniques: radar astronomy
techniques: radial velocities
techniques: spectroscopic
telescopes

Astronomical data bases

astronomical data bases: miscellaneous
atlases
catalogues
surveys
virtual observatory tools

Software

software: data analysis
software: development
software: documentation
software: public release
software: simulations

Astrometry and celestial mechanics

astrometry
celestial mechanics
eclipses
ephemerides
occultations
parallaxes
proper motions
reference systems
time

The Sun

Sun: abundances
Sun: activity
Sun: atmosphere
Sun: chromosphere
Sun: corona
Sun: coronal mass ejections (CMEs)
Sun: evolution
Sun: faculae, plages
Sun: filaments, prominences
Sun: flares
Sun: fundamental parameters
Sun: general
Sun: granulation
Sun: helioseismology
Sun: heliosphere
Sun: infrared
Sun: interior
Sun: magnetic fields
Sun: oscillations
Sun: particle emission
Sun: photosphere
Sun: radio radiation
Sun: rotation
(*Sun:*) solar–terrestrial relations
(*Sun:*) solar wind
(*Sun:*) sunspots
Sun: transition region
Sun: UV radiation
Sun: X-rays, gamma-rays

Planetary systems

comets: general

comets: individual: . . .

Earth
interplanetary medium
Kuiper belt: general

Kuiper belt objects: individual: . . .

meteorites, meteors, meteoroids

minor planets, asteroids: general

minor planets, asteroids: individual: . . .

Moon
Oort Cloud
planets and satellites: atmospheres
planets and satellites: aurorae
planets and satellites: composition
planets and satellites: detection
planets and satellites: dynamical evolution and stability
planets and satellites: formation
planets and satellites: fundamental parameters
planets and satellites: gaseous planets
planets and satellites: general

planets and satellites: individual: . . .

planets and satellites: interiors
planets and satellites: magnetic fields
planets and satellites: oceans
planets and satellites: physical evolution
planets and satellites: rings
planets and satellites: surfaces
planets and satellites: tectonics
planets and satellites: terrestrial planets
planet–disc interactions
planet–star interactions
protoplanetary discs
zodiacal dust

Stars

stars: abundances
stars: activity
stars: AGB and post-AGB
stars: atmospheres
(*stars:*) binaries (*including multiple*): close
(*stars:*) binaries: eclipsing
(*stars:*) binaries: general
(*stars:*) binaries: spectroscopic
(*stars:*) binaries: symbiotic
(*stars:*) binaries: visual
stars: black holes
(*stars:*) blue stragglers
(*stars:*) brown dwarfs
stars: carbon
stars: chemically peculiar
stars: chromospheres
(*stars:*) circumstellar matter
stars: coronae
stars: distances
stars: dwarf novae
stars: early-type
stars: emission-line, Be
stars: evolution
stars: flare
stars: formation
stars: fundamental parameters
(*stars:*) gamma-ray burst: general
(*stars:*) **gamma-ray burst: individual: . . .**
stars: general
(*stars:*) Hertzsprung–Russell and colour–magnitude diagrams
stars: horizontal branch
stars: imaging
stars: individual: . . .
stars: interiors

- stars: jets
- stars: kinematics and dynamics
- stars: late-type
- stars: low-mass
- stars: luminosity function, mass function
- stars: magnetars
- stars: magnetic field
- stars: massive
- stars: mass-loss
- stars: neutron
- (stars:)* novae, cataclysmic variables
- stars: oscillations *(including pulsations)*
- stars: peculiar *(except chemically peculiar)*
- (stars:)* planetary systems
- stars: Population II
- stars: Population III
- stars: pre-main-sequence
- stars: protostars
- (stars:)* pulsars: general
- (stars:)* **pulsars: individual: . . .**
- stars: rotation
- stars: solar-type
- (stars:)* starspots
- stars: statistics
- (stars:)* subdwarfs
- (stars:)* supergiants
- (stars:)* supernovae: general
- (stars:)* **supernovae: individual: . . .**
- stars: variables: Cepheids
- stars: variables: Scuti
- stars: variables: general
- stars: variables: RR Lyrae
- stars: variables: S Doradus
- stars: variables: T Tauri, Herbig Ae/Be
- (stars:)* white dwarfs
- stars: winds, outflows
- stars: Wolf–Rayet

Interstellar medium (ISM), nebulae

- ISM: abundances
- ISM: atoms
- ISM: bubbles
- ISM: clouds
- (ISM:)* cosmic rays
- (ISM:)* dust, extinction
- ISM: evolution
- ISM: general
- (ISM:)* HII regions
- (ISM:)* Herbig–Haro objects

ISM: individual objects: . . .

- (except planetary nebulae)*
- ISM: jets and outflows
- ISM: kinematics and dynamics
- ISM: lines and bands
- ISM: magnetic fields
- ISM: molecules
- (ISM:)* photodissociation region (PDR)
- (ISM:)* planetary nebulae: general
- (ISM:)* **planetary nebulae: individual: . . .**
- ISM: structure
- ISM: supernova remnants

The Galaxy

- Galaxy: abundances
- Galaxy: bulge
- Galaxy: centre
- Galaxy: disc
- Galaxy: evolution
- Galaxy: formation
- Galaxy: fundamental parameters
- Galaxy: general
- (Galaxy:)* globular clusters: general
- (Galaxy:)* **globular clusters: individual: . . .**
- Galaxy: halo
- Galaxy: kinematics and dynamics
- (Galaxy:)* local interstellar matter
- Galaxy: nucleus
- (Galaxy:)* open clusters and associations: general
- (Galaxy:)* **open clusters and associations: individual: . . .**
- (Galaxy:)* solar neighbourhood
- Galaxy: stellar content
- Galaxy: structure

Galaxies

- galaxies: abundances
- galaxies: active
- galaxies: bar
- (galaxies:)* BL Lacertae objects: general
- (galaxies:)* **BL Lacertae objects: individual: . . .**
- galaxies: bulges
- galaxies: clusters: general

galaxies: clusters: individual: . . .

- galaxies: clusters: intracluster medium
- galaxies: disc
- galaxies: distances and redshifts
- galaxies: dwarf
- galaxies: elliptical and lenticular, cD
- galaxies: evolution
- galaxies: formation
- galaxies: fundamental parameters
- galaxies: general
- galaxies: groups: general

galaxies: groups: individual: . . .

- galaxies: haloes
- galaxies: high-redshift

galaxies: individual: . . .

- galaxies: interactions
- (galaxies:)* intergalactic medium
- galaxies: irregular
- galaxies: ISM
- galaxies: jets
- galaxies: kinematics and dynamics
- (galaxies:)* Local Group
- galaxies: luminosity function, mass function
- (galaxies:)* Magellanic Clouds
- galaxies: magnetic fields
- galaxies: nuclei
- galaxies: peculiar
- galaxies: photometry
- (galaxies:)* quasars: absorption lines
- (galaxies:)* quasars: emission lines
- (galaxies:)* quasars: general

(galaxies:) **quasars: individual: . . .**
(galaxies:) quasars: supermassive black holes
galaxies: Seyfert
galaxies: spiral
galaxies: starburst
galaxies: star clusters: general

galaxies: star clusters: individual: . . .
galaxies: star formation
galaxies: statistics
galaxies: stellar content
galaxies: structure

Cosmology

(cosmology:) cosmic background radiation
(cosmology:) cosmological parameters
(cosmology:) dark ages, reionization, first stars
(cosmology:) dark energy
(cosmology:) dark matter
(cosmology:) diffuse radiation
(cosmology:) distance scale
(cosmology:) early Universe
(cosmology:) inflation
(cosmology:) large-scale structure of Universe
cosmology: miscellaneous
cosmology: observations
(cosmology:) primordial nucleosynthesis
cosmology: theory

Resolved and unresolved sources as a function of wavelength

gamma-rays: diffuse background
gamma-rays: galaxies
gamma-rays: galaxies: clusters
gamma-rays: general
gamma-rays: ISM
gamma-rays: stars
infrared: diffuse background
infrared: galaxies
infrared: general
infrared: ISM
infrared: planetary systems
infrared: stars
radio continuum: galaxies
radio continuum: general
radio continuum: ISM
radio continuum: planetary systems
radio continuum: stars
radio continuum: transients
radio lines: galaxies
radio lines: general
radio lines: ISM
radio lines: planetary systems
radio lines: stars
submillimetre: diffuse background
submillimetre: galaxies
submillimetre: general
submillimetre: ISM
submillimetre: planetary systems
submillimetre: stars
ultraviolet: galaxies

ultraviolet: general
ultraviolet: ISM
ultraviolet: planetary systems
ultraviolet: stars
X-rays: binaries
X-rays: bursts
X-rays: diffuse background
X-rays: galaxies
X-rays: galaxies: clusters
X-rays: general
X-rays: individual: . . .
X-rays: ISM
X-rays: stars

Transients

(transients:) black hole mergers
(transients:) black hole - neutron star mergers
(transients:) fast radio bursts
(transients:) gamma-ray bursts
(transients:) neutron star mergers
transients: novae
transients: supernovae
transients: tidal disruption events