

Resources for Astrophysics

Contact details for further help are at the end of this guide.

The resources in this guide will help you learn more about your subject. The best place to start your search is **Discover**, which provides you with easy access to thousands of books, eBooks, journal articles and much more. You can access Discover and other key resources via the **Electronic Library** at: www.ljmu.ac.uk/library/e-library

Remember, your modules also have reading lists in Canvas with links to recommended books, eBooks, journal articles and other subject resources.

Books and eBooks

There is an extensive collection of books and eBooks on all aspects of Astrophysics. You can browse what is available in your subject area or look for specific titles by searching **Discover**.

- Go to **Discover**, if prompted, **Sign in** with your **LJMU username@ljmu.ac.uk** and **password**
- Type a book title or keywords and select the search icon
- From the results screen, you can filter your results by selecting **Books**
- Select a book title to see more details and availability
- eBooks will have links to view online
- Print books will show number of copies and location

Print books have a class number and are organised numerically by that number on the shelves. Common class numbers are shown below:

Astronomical Instruments		
For example: Telescopes	522	
Astrophysics	523.01	
Celestial Mechanics		
For example: Gravity	521	
Geodetic Astronomy and Geographical Positions		526.6
Magnetism	538	
Modern Physics	539	
Physics: Light	535.2 – 6	

Physics: Heat and Thermodynamics	536
Physics: Mass and Gravity	531.14
Solar System	523.2
Stars	523.8
The Universe, Galaxies, Quasars	523.1

Journals

Journals are published on a regular basis and contain up-to-date information. Journals contain articles focussing on specific topics written by subject specialists.

To find individual journal titles on your subject area:

- Go to **Discover**, if prompted, **Sign in** with your **LJMU username@ljmu.ac.uk** and **password**
- Select the **Journals** option
- Type a journal title you wish to access and select the search icon
- Select a journal title to see more details and availability
- eJournals will have links to view online
- Print journals will show number of issues and location

A selection of journals on Astrophysics are shown below:

Astronomical Journal

Astronomy and Astrophysics

Astrophysics

Astrophysics and Space Science

Journal of astronomical telescopes, instruments, and systems

Monthly Notices of the Royal Astronomical Society

Publications of the Astronomical Society of the Pacific

Databases

You can search for journal articles using **Discover** or via individual databases. There are different types of databases. For example:

- **Full-text databases** provide access to full-text information such as journal articles, reports, book chapters, newspaper articles, etc.
- **Abstracting and Indexing Databases** are searchable indexes, you can view the abstract or summary for each resource. If full-text is available follow the link, if not you can request an

[Inter-library loan](https://www.ljmu.ac.uk/microsites/library/resources/access-to-other-libraries/inter-library-loan-service) at: <https://www.ljmu.ac.uk/microsites/library/resources/access-to-other-libraries/inter-library-loan-service>

To access a database:

- Go to **Discover**, if prompted, **Sign in** with your **LJMU username@ljmu.ac.uk** and **password**
- Select the **Databases** option
- Select **Astrophysics** to see suggested databases or type the name of the database in the search box and select the **search icon**
- Select the database title to see more details and note any log-in requirements
- Select the database link

Academic Full-text Databases

BoB (Box of Broadcasts)

Box of Broadcasts (BoB) gives you access to an archive of over one million TV and radio programmes from 2007 onwards, including all the main free-to-air TV channels. You can link, make short clips and playlists of content.

IEEE XPlore

A powerful search tool that provides access to key scientific and technical research published by IEEE (Institute of Electrical and Electronics Engineers) and its partners such as: IEEE journals, IEEE conference proceedings, IEEE standards and the IEEE-Wiley eBooks Library and IET conference proceedings.

IET Open Access Journals

Provides access via the IET (The Institution of Engineering and Technology) Hub to the collection of IET open access journals from 2013 to date.

IOPscience (Institute of Physics Journals) (IoP)

IOPscience is an online service for journal content published by IOP Publishing. IOPscience embraces innovative technologies to make it easier for researchers to access scientific, technical and medical content. Has a rolling 10-year full text archive.

ProQuest Central

ProQuest Central provides access to databases across all major subject areas and includes thousands of full-text scholarly journals, trade and professional titles, newspapers, magazines, dissertations, working papers, case studies, and market reports.

ScienceDirect

The world's leading source for scientific, technical, and medical research. It is a multidisciplinary database, which provides full-text access to more than 16 million references from over 2,500 high-quality journals and over 39,000 books and major reference works. Digital archive dates back to 1823.

SPIE Digital Library

Provides access to conference proceedings and key journals on a range of topics including high power lasers and their applications, sensors and biophotonics.

Taylor and Francis

A multidisciplinary database providing full-text access to quality, peer-reviewed journals published by Taylor & Francis, Routledge and Psychology Press.

Wiley Online Library

A multi-disciplinary database providing access to over 4 million articles from 1,600 journals, online book chapters and eBooks published by Wiley.

Academic Abstracting and Indexing Databases

Astrophysics Data System

The Astrophysics Data System is a digital library portal managed by the Smithsonian Astrophysical Observatory (SAO) and NASA, which provides access to more than 15 million citations for publications in astronomy and astrophysics, instrumentation, physics and geophysics, and general science, as well as arXiv e-prints.

Compendex

An abstracting and indexing database covering all areas of engineering and applied science. Coverage includes transportation, optical technology, computers and data processing, electronics and communications, civil, mechanical, materials and automotive engineering as well as narrower subtopics within all these and other major engineering fields. The database indexes over 4,000 engineering journal titles and over 95,000 conference proceedings.

Inspec

A leading abstracting and indexing database covering all areas of engineering and applied science. Coverage includes electrical engineering, electronics, physics, control engineering, information technology, communications and computing. The database indexes over 5,000 technical and scientific journal titles and over 70,000 conference proceedings

Scopus

A multi-disciplinary abstract and citation database of peer-reviewed literature: journals, books and conference proceedings, many with links to full text.

Web of Science

A powerful research platform and global citation index including over 161 million records for books, journals, and conference proceedings across 254 disciplines. Web of Science also includes comprehensive archives from 1900+ and citation data such as journal impact factors and h-index to help you identify quality research.

Zetoc

Zetoc Search offers access to the contents pages of more than 39,500 current journals and 65.5 million article citations and conference papers dating back to 1993. The database is updated daily. Zetoc Alert is a current awareness service, which sends email alerts matching your search criteria whenever new records are added to the database.

You can check if LJMU has access to full-text by clicking on the **Full Text** icon within the database, this will check our other collections and direct you to any available full-text.

Websites

The content of websites is unregulated. Therefore, it is important that you check the quality and accuracy of information on the internet to ensure that it is reliable, accurate and of an academic standard. There are selected websites or search engines that you can use to help find appropriate information online, for example Google Scholar. If you find details for a relevant resource on the internet, you can check if LJMU has full-text access.

A selection of useful websites and search engines are shown below:

arXiv.org

An open access repository of 1,588,176 e-prints and publications in the fields of physics, mathematics, computer science, quantitative biology, quantitative finance, statistics, electrical engineering and systems science, and economics. arXiv.org is available at:

<http://arxiv.org/>

Google Scholar

A large search engine which provides access to scholarly information and includes links to selected full-text from LJMU's resources. Access to LJMU's full-text content occurs automatically on campus; for off campus access you need to click Settings, Library Links and save Liverpool John Moores University as your institution. Google Scholar is available at:

<http://scholar.google.co.uk/>

RefSeek*

An academic search engine which locates scholarly information. RefSeek* is available at:

<http://www.refseek.com/>

Further Help

The Academic Engagement Librarian for the Astrophysics Research Institute is:

Kelsey Johnston – k.l.johnston@ljmu.ac.uk

Please contact her to arrange a one-to-one appointment.

Guide by: Kelsey Johnston

Updated: August 2023