Queen's University Archives

Finding Aid - Arthur Eddington collection (F00695)

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Queen's University Archives Kathleen Ryan Hall Queen's University Kingston Ontario Canada K7L 3N6

Telephone: 613-533-2378

Fax: 613-533-6403

Email: archives@queensu.ca http://archives.queensu.ca

http://db-archives.library.queensu.ca/index.php/arthur-eddington-collection

Arthur Eddington collection

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Summary information

Repository: Queen's University Archives

Title: Arthur Eddington collection

Reference code: F00695

Date: 1915-1942 (date of creation)

Physical description: 0.03 m of textual records

Physical location: 3237.3 SE

Language: English

Language: German

Dates of creation, revision and deletion:

Administrative history / Biographical sketch

Note

Arthur Eddington was born on December 28, 1882 in Kendal, England. He attended Owens College where he studied physics and mathematics until he graduated in 1902. From 1906 to 1913, he was the primary assistant at the Greenwich Royal Observatory. In 1913, he accepted a position as a professor of astronomy at Cambridge. While at Cambridge, between 1914 and 1918, his main area of study became that of relativity. He was knighted in 1930 as a result of his work. He spent a great deal of his remaining years critiquing the work of his colleagues in astrophysics.

Eddington made significant contributions and published several books that helped expand the areas of general relativity and astrophysics. He studied the properties of a solar eclipse on various expeditions around the world. This research eventually confirmed Albert Einstein's theory that as light passes a very massive star, its path is bent due to gravity. Eddington spent a great amount of time researching the internal makeup of stars. One of his findings in this field was that the scattering of electrons is the primary source of the opacity of stars. Along with this finding, he also determined that a star's luminosity if finite for a supplied mass. The divisor of the inequality for finding a star's maximum luminosity is now called the Eddington Limit. These findings were published in 1926 in his book "The Internal Constitution of Stars." Both he and Albert Einstein created arguments against the existence of black holes, which were subsequently disproved in the 1950s. Sir Arthur Eddington died on November 22, 1944 in Cambridge, England.

Custodial history

This material was accumulated by Dr. Allie Vibert Douglas. It was most likely brought together when she was preparing the Forward to her biography of Sir Arthur Eddington. It was deposited at Queen's in 1954.

Scope and content

The collection consists of both originals and copies of correspondence between Eddington and other scientists. The records provide a brief glimpse of the development of the field of astrophysics. The correspondents include Albert Einstein, Erwin Shrodinger, Harlow Shapley, Henry Norris Russell, Walter S. Adams and J.C. Kapetyn. Also included are two copies of pages from the manuscripts, Differentiation of any tensor (1918) and Mass-luminosity equation (1924).

Notes

Title notes

Location of originals

3237.3 SE

Restrictions on access

Open

Conditions governing use

Public domain

Accruals

No further accruals are expected

Other notes

• **Publication status**: Published

Series descriptions

Reference code	Title	Dates	Physical description
F00695-f1	File - W. S. Adams	1921-1924	

F00695-f2	File - A. Einstein	1919-1926
F00695-f3	File - J. C. Kapteyn	1915-1923
F00695-f4	File - Various: Schrodinger, Russell, Shapley and others	1917-1942
F00695-f5	File - Theories (sample)	1918, 1924