

Leiden Observatory Archives, Willem de Sitter papers (WdS)

Inventory by David Baneke, 2009

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Introduction

This is the inventory of the papers of Willem de Sitter (1872-1934), professor of astronomy at Leiden University from 1908-1934 and director of Leiden Observatory from 1918-1934.

The collection includes scientific and other professional correspondence, manuscripts and notes, course notes, and papers regarding the management Leiden Observatory. Of special interest are the papers related to general relativity and cosmology, including correspondence with Albert Einstein, A.S. Eddington, Georges Lemaître and H.A. Lorentz, as well as detailed (and dated) notes by De Sitter. There is also a large collection of letters from Ejnar Hertzsprung concerning his scientific work and the daily management of the Observatory.

The papers are preserved at Leiden University Library, Western Manuscript Collection. The De Sitter papers contain c. 2,5 meters of archive material.

References to the collection in published credits must include the following information: Leiden University Library, Willem de Sitter papers (WdS), [callnumber].

Willem de Sitter (1872-1934) studied astronomy at Groningen University. From 1897-1899, he worked at the Royal Observatory at the Cape of Good Hope. After he obtained his doctorate in 1901 in Groningen, he remained there as the assistant of J.C. Kapteyn. In 1908 he was appointed professor of astronomy at Leiden University; 10 years later he also became director of the Observatory in that city. He conducted a radical reorganisation of the observatory, introducing new research and education programmes and expanding the observatory. The most notable members of the new scientific staff were Ejnar Hertzsprung and Jan Oort.

De Sitter is mostly remembered for his work on the astronomical and cosmological consequences of the general relativity theory. He worked on this subject in 1916-17, when he wrote three classic articles in the *Monthly Notices*, and again in 1930-34. Apart from this, he mainly worked on celestial mechanics, esp. the theory of Jupiter's satellites. From 1925-1928, De Sitter was President of the International Astronomical Union. He was awarded honorary doctorates from the several universities, including Cambridge, Oxford and Cape Town. He received the Gold Medal of the Royal Astronomical Society in 1931 and the Bruce Medal of the Astronomical Society of the Pacific in the same year.

De Sitter was succeeded as director of the observatory by Ejnar Hertzsprung.

Provenance

These papers were collected by Willem de Sitter in the course of his work. They have been bequeathed to the Observatory and were preserved there until they were transferred to the University Library.

In 1974-75, Carla Kahn, wife of visiting professor F.D. Kahn, searched the archive, looking for the Einstein correspondence, which she found (Kahn 1975). In the course of her search, she made a card index of the correspondence. In 1998, Reinold de Sitter (grandson of Willem) made an inspired but incomplete inventory of the De Sitter papers (R. de Sitter 1998).

Over the years, many people have consulted the archive, either for research or out of pure curiosity. Also, several papers have been temporarily removed for research purposes or for exhibitions. These papers were all returned to the archive.

Several files were found in the collections of Leiden University Library. It is not clear when or why they were originally transferred to these collections. They have now been reunited with the Observatory Archives. These files are indicated in the inventory.

The archive was transferred to Leiden University Library in 2009, by agreement between Leiden Observatory and the University Library.

In several cases, only a selection of a file has been preserved. This mostly concerns large files of routine calculations related to the theory of Jupiter's Moons. In these cases, a sample of the file has been preserved by way of example. These files are indicated in the inventory.

Some official papers concerning committees or organisations have been removed. This concerns annual reports, budgets, and minutes of meetings. These papers can be found in the archives of the relevant organisations.

The selection was made by David Baneke, advised by Arend Pietersma (Leiden University Library), Frans van Lunteren (Leiden Observatory) and Huib Zuidervaart (Huygens Institute).

Notes for users

The papers have been reordered and repacked. The original files were maintained as much as possible. Obviously misfiled papers have been refiled, and obviously related papers have been put together, while obviously unrelated papers have been separated.

A table of conversion of box or file numbers is provided for papers that have been described in previous literature.

To facilitate researchers, each file has been given a short title. In some cases these titles were original designations by the authors. The other titles are mine. The main subject of each file is indicated in the inventory. This is not an exhaustive description, but a first indication, intended for researchers.

Correspondence has been ordered alphabetically by correspondent, following the Dutch system (disregarding prefixes such as *van*, *van der*, etc.).

Within the files, correspondence has been ordered chronologically. Other papers are preserved in the order in which they were found.

“Correspondence with ...” indicates that the file contains letters from both correspondents; “letters from ...” indicates that only one side of the correspondence has been preserved in this archive.

Abbreviations:

BAN Bulletin of Astronomical Institutes of the Netherlands
IAU International Astronomical Union
IEB International Education Board (Rockefeller Foundation)
UOJ Union Observatory Johannesburg

Selected literature:

- Baneke, D., ‘Teach and travel. Leiden Observatory and the renaissance of Dutch astronomy in the Interwar years’, *Journal for the History of Astronomy* (2010).
- Guichelaar, J., *Willem de Sitter. Een alternatief voor Einsteins heelalmodel* (Amsterdam, 2009).
- Herk, G. van, H. Kleibrink en W. Bijleveld, *De Leidse sterrewacht. Vier eeuwen wacht bij dag en nacht*, Zwolle 1983.
- Kahn, C. en F. Kahn, ‘Letters from Einstein to de Sitter on the nature of the Universe’, in: *Nature* 257 (1975) p. 451-454.
- Kerszberg, P., *The invented universe. The Einstein-De Sitter controversy (1916-17) and the rise of relativistic cosmology*, Oxford 1989.
- Röhle, S., *Willem de Sitter in Leiden – Ein Kapitel in der Rezeptionsgeschichte der Relativitätstheorien*, dissertation Johannes Gutenberg-Universität, Mainz 2007.
- Sitter, R. de, *Grandfather, a charcoal sketch*, z.p. 1998.
- Sitter, W. de, *Short history of the observatory of the university at Leiden 1633-1933*, Haarlem 1933.
- Sitter-Suermondt, E. de, *Willem de Sitter, een mensenleven*, Haarlem 1948.

Correspondence by correspondent

1. Aitken

6 letters, 1932-1933

Correspondence with R.G. Aitken (Lick Observatory), regarding student G.P. Kuiper's stay at Lick Observatory.

2. Bianchi

5 letters, 1933

Correspondence with E. Bianchi (Milan), regarding a stay of his assistant dr. Gratton in Leiden.

3. Van der Bilt

6 letters, 1928, 1932-1934,

Letters from Jan van der Bilt (Utrecht) on various topics.

4. Bok

2 letters, 1929

Letters from Bart J. Bok, thanking De Sitter for his help during his time as a student in Leiden

5. Van den Bos

- 5.1 correspondence

69 letters, 1925-1934

Correspondence with W.H. van den Bos, Leiden astronomer at UOJ. Topics include double star work, personal and institutional life at Union Observatory, and the plans for a new telescope in South Africa. Includes manuscript *Orbital Elements of Binary Stars* (4pp.). NB: Includes some correspondence with the South African government on administrative issues.

- 5.2 Bloemfontein

2 letters, 1928-1929

Copies of two letters from W.H. van den Bos: one to R.G. Aitken (Lick Observatory) and one to the observers of Lamont-Hussey Observatory in Bloemfontein, regarding cooperation in double star work. Van den Bos severely criticizes the work done in Bloemfontein.

6. Brouwer

17 letters, 1927-1928 and 1930.

Letters from former Leiden student Dirk Brouwer, reporting on his work at Yale and Berkely (mostly Jupiter moons and Trojan group), and on some bureaucratic matters regarding visa.

7. Brown

2 letters, 1916, 1926

Letters from E.W. Brown (Yale) on moon tables and Jupiter satellites.

8. Courvoisier

1 letter, 1925

One letter from L. Courvoisier (Neubabelsberg), on fundamental declinations. In German.

9. Crommelin

2 letters, 1931

Correspondence with A.C.D. Crommelin (Greenwich), on the expansion of the universe and on Jupiter satellites.

10. Curtis

1 letter, 1917

Letter from H.D. Curtis (Lick), on the deflection of light by the sun.

11. Droste

1 letter, 1916

Letter from J. Droste (Leiden), on general relativity.

12. Dyson

4 letters, 1915, 1919, 1923, 1931

Correspondence with Frank W. Dyson (Greenwich), concerning instruments and the future of Cape Observatory. In one letter (1919), Dyson explained the staff and salary arrangements at his observatory.

13. Easton

1 letter, 1922

One letter from C. Easton, journalist and amateur astronomer, concerning a publication in the BAN.

14. Eddington

11 letters, 1916-1918, 1930

Letters from A.S. Eddington (Cambridge) concerning general relativity and the publication of De Sitter's articles in the Monthly Notices (1916-1918). Also includes and one letter from De Sitter regarding the expansion of the universe (1930), and a copy of another letter from Eddington (1918), from a private collection.

15. Ehrenfest

1 letter, 1917

Letter from physicist Paul Ehrenfest on the De Sitter and Einstein universe models and on a congress.

16. Einstein

21 letters, 1916-1920, 1933¹

Correspondence with (mainly letters from) Albert Einstein, on general relativity and cosmology, esp. De Sitters 'model B' solution. On several of Einstein's letters, De Sitter wrote comments in pencil. From 1933: one letter on Einstein's personal situation and German politics, and two letters regarding the planned relocation of the Radcliffe Observatory from Oxford to South Africa. In German.

NB: Includes 1 forwarded letter by J.C. Kluyver (Leiden) (in Dutch).

17. Finlay-Freundlich

2 letters, 1917

Correspondence with E. Finlay-Freundlich (Berlin-Babelsberg) on general relativity. De Sitter's answer is a draft. In German.

¹ There is another letter from De Sitter to Einstein inserted in notebook S12 (inv.no.132).

18. Van Gent

73 letters, 1928-1934

- 18.1 correspondence 1928-1930

- 18.2 correspondence 1931-1934

Correspondence with H. van Gent, Leiden astronomer at UOJ. Topics include his work on variable stars and small planets, the design and construction of the Leiden telescope in Johannesburg, and administrative matters.

NB: Includes forwarded correspondence with F. Schlesinger (Yale) and H.L. Alden (Yale Southern Station).

19. De Gijsselaar

1 letter, 1926

A 'strictly confidential' letter from N.C. de Gijsselaar (mayor of Leiden), warning De Sitter to keep an eye on J.H. Oort, because of his alleged communist activities.

20. Gill

9 letters, 1901, 1911-1914

Correspondence with Sir David Gill (London), on an introduction that Gill was to write for De Sitter's work on Jupiter satellites. Includes two manuscripts of this introduction (9 and 10 pp.). Also includes a letter from E.H. Hills (Royal Astronomical Society).

21. Guthnick

4 letters, 1928-1929

Letters from P. Guthnick (Neubabelsberg) on German membership of the IAU. In German.

22. Hale

4 letters, 1924, 1928 and 1932

Correspondence with George Ellery Hale (Mt. Wilson) with an attached manuscript, regarding the Kapteyn fund (1924); Hale's plans for a 200-inch telescope (1928); and *Kosmos* (1932).

NB: Includes a forwarded letter from C.E. St. John (Mt. Wilson).

23. Hertzsprung

301 letters 1918-1934

- 23.1 Hertzsprung to De Sitter: from Potsdam, 1918-1919

- 23.2 Hertzsprung to De Sitter: from Leiden, 1919-1921

- 23.3 Hertzsprung to De Sitter: various, 1922-1923

- 23.4 Hertzsprung to De Sitter: from Johannesburg, 1923-1925

- 23.5 Hertzsprung to De Sitter: from Harvard, 1926-1927

- 23.6 Hertzsprung to De Sitter: from Leiden, 1929

- 23.7 Hertzsprung to De Sitter: from Johannesburg, 1930-1931

- 23.8 Hertzsprung to De Sitter: various, 1931-1934

- 23.9 De Sitter to Hertzsprung: from Arosa, 1919-1921

- 23.10 De Sitter to Hertzsprung: from Leiden, 1930-1933

Correspondence between De Sitter and Ejnar Hertzsprung, deputy director of the Observatory. Topics include Hertzsprung's appointment, the reorganization of the Observatory, daily business at the Observatory, the founding of the BAN, the plans for new observatories in the Dutch East Indies and South Africa, Hertzsprung's work on variable stars, and the careers of young Leiden astronomers.

NB: Includes a forwarded letter from G. Kuiper (1929).

24. Hinks

7 letters, 1914

Letters from A.R. Hinks regarding the papers of the late D. Gill.

25. Hins

10 letters, 1919-1920 and 1932

Letters from C.H. Hins, observer at Leiden Observatory, to De Sitter in Arosa, concerning daily work at the Observatory (1919-1920). Also includes two letters from Hins and his wife concerning their personal financial situation (1932).

26. Hough

9 letters, 1900, 1913-1915, 1923

Correspondence with S.S. Hough (Cape of Good Hope) on Jupiter plates and on Hertzprung's plan to visit the Royal Observatory at Cape of Good Hope.

27. Ten Houte de Lange

2 letters, 1934

Letters from W.G. ten Houte de Lange, manufacturer of globes, planetariums and other 'cosmographic' instruments, with accompanying descriptions and drawings.

NB: includes a copy of a letter by H. Spencer Jones (Greenwich).

28. Innes

97 letters, 1914-1933

- **28.1.1 1914-1916**

- **28.1.2 1919-1923**

- **28.1.3 1924-1933**

Correspondence with (mainly from) R.T.A. Innes of UOJ. Topics include personal matters, a proof of the variability of the rotation of the Earth, Jupiter's satellites, the appointment of Van den Bos at UOJ, a visit by Hertzprung to OUI, Innes' honorary doctorate from Leiden University and Innes' reappointment as director of Union Observatory in 1926. Also includes several manuscripts on observations of Jupiter and its satellites, and a letter from Frank Robbins with news of Innes' death (1933).

NB: Includes forwarded correspondence with R. Schorr (Hamburg) and Frank Dyson (Greenwich), and some correspondence with the South African Ministry for the Interior.

- **28.2 Innes-Brouwer correspondence**

4 letters, 1927

Copies of correspondence between R.T.A. Innes and D. Brouwer, on Jupiter Satellites.

29. Jeffreys

7 letters, 1926 and 1932

Correspondence with H. Jeffreys (Cambridge) and notes on rotation of the earth and geodetic precession (14ff.).

30. Kapteyn

26 letters, 1917-1922

Letters from J.C. Kapteyn, astronomer at Groningen University and De Sitter's mentor.

Topics include parallaxes, the mass of the Galaxy (1917), the plans for a new observatory in the Dutch East Indies, and the reorganization of Leiden observatory. Also includes some

notes by De Sitter from a conversation with Kapteyn on the future of Leiden Observatory, on 23 August 1918.

NB: Includes one letter from Henriette Hertzsprung-Kapteyn (1920).

31. Klein

2 letters, 1918

Two letters from Felix Klein (Göttingen), on De Sitters 'model B' universe. In German.

32. Kluyver

3 letters, 1925

Letters from J.C. Kluyver (Leiden), on a mathematical problem.

33. Kottler

4 letters, 1921-1922

Correspondence with F. Kottler (Vienna) on general relativity.

34. Kremer

6 letters, 1920-1923

Letters from student P. Kremer, concerning his PhD dissertation on Jupiter satellites. Includes some notes.

35. Kreiken

2 letters, 1931

Correspondence with E.A. Kreiken (Bandoeng, Java), regarding negative articles about his work that had appeared in an East Indian newspaper.

36. Kuiper

8 letters, 1933-1934

Letters from Gerard P. Kuiper, student from Leiden, on his life and work at Lick Observatory. Includes one letter from De Sitter.

37. Von Laue

1 letter, 1934

Letter from Max von Laue (Berlin) on the political situation in Germany, with a request to publish it anonymously in a Dutch newspaper. In German.

38. Lemaître

9 letters, 1930-1931

Correspondence with Georges Lemaître (Louvain) on the expanding universe.

Includes several manuscripts by Lemaître:

- *The Expanding Universe* (16pp.)

- *On the random motion of particles in the expanding universe. Explanation of a paradox* (4pp.)

- *L'Hypothèse de Millikan Cameron dans un univers de rayon variable* (3pp.).

Also includes a copy of the *Annales de la Société Scientifique de Bruxelles* containing Lemaître's 1927 article. The cover of the last article contains a remark by Eddington: "This seems a complete answer to the problem we were discussing".

Partly in French.

NB: Includes a proof print of *On the instability of Einstein's spherical world* (3 sheets) by A.S. Eddington, with notes by De Sitter, and several letters from R.C. Tolman (Caltech).

39. Leuschner

2 letters, 1929

Correspondence with A.O. Leuschner (Berkeley), concerning the Watson Medal.

40. Levi-Civita

5 letters, 1916-1918

Correspondence with Tullio Levi-Civita (Padua) on general relativity. In French.

41. Lindblad

2 letters, 1928

Letters from Bertil Lindblad (Stockholm), on Wargentin's Jupiter tables.

42. Lorentz

4 letters, 1916-1917

Letters from H.A. Lorentz (Haarlem) on general relativity.

43. Oort

- 43.1 1922

4 letters, 1922

Letters from De Sitter to Jan H. Oort, at that time student in Groningen, on Schlesinger's offer to host Oort at Yale for one year.

- 43.2 1931-1933

16 letters 1931-1933

Correspondence with Jan H. Oort, acting director of Leiden Observatory while De Sitter was in America. Topics include Observatory affairs and De Sitter's meetings with American astronomers (1931-1932). Also includes a letter from De Sitter to H.T. Stetson on Oort's plans to visit Perkins Observatory and some notes by Oort, on letters to be forwarded to De Sitter.

NB: Includes a copy of a letter from De Sitter to Edwin Hubble (Mt. Wilson).

44. Oppenheim

3 letters, 1919

Correspondence with J. Oppenheim, one of *Curatoren* (trustees) of Leiden University, on the reorganization of the Observatory, and on the plans for a Southern station in South Africa. The two letters from De Sitter are probably drafts.

45. Pannekoek

91 letters, 1918-1933

- 45.1 correspondence 1918-1921

- 45.2 correspondence 1922-1933

Letters from Anton Pannekoek, in 1918 candidate deputy director of Leiden Observatory, from 1919 astronomer at Amsterdam University. Most letters are concerned with the planned reorganization of the Observatory and the bureaucratic and political problems surrounding the appointment of Pannekoek (1918-1919). Other topics include astronomical publications (including Schmidt galaxy maps; cf inv.no. 79), the *Nederlandse Astronomenclub*, the BAN, and some students.

46. Payne

3 letters, 1932-1933

Correspondence with C.H. Payne (Harvard), on a visit to Leiden, and on the work of student H.A. Kluyver in Harvard Observatory.

47. Proost-Thoden van Velzen

3 letters, 1932

Correspondence with J.C. Proost-Thoden van Velzen on the interpretation of relativity theory.

48. Van Rhijn

47 letters, 1922-1934

Correspondence with P.J. van Rhijn (Groningen), mostly concerning the Plan of Selected Areas. Other topics include astronomical publications (BAN), on students and assistants, on plans to commemorate Kapteyn, and on Eddington's *The Expanding Universe*.

NB: Includes forwarded letters from L. Okulicz (Pulkovo), Spencer Jones (Cape of Good Hope) and F. Schlesinger (Yale).

49. Sanders Correspondence

135 letters, 1919-1926

- 49.1 Correspondence 1918-1922

- 49.2 Correspondence 1923-1926

Correspondence with (mainly letters from) Carl Sanders, an amateur-astronomer from Matuba in Portuguese Congo, who worked on absolute declinations. Includes a manuscript by Sanders: *Declinatiebepalingen, nieuwe methode*. Also includes some correspondence with Sanders' brother, A. Sanders in Amsterdam, concerning C. Sanders' financial difficulties. Correspondents: De Sitter, A. Sanders, C. Sanders.

NB: Includes 6 stereoscopic pictures of Sanders' instruments in Matuba.

NB: Includes a note from G. van Herk to Mrs Kahn, in which he suggests to add these letters to the Archive (ca. 1974-1975).

- 49.3 Finance

Some papers concerning Sanders' financial situation.

50. Schepper

5 letters, 1929 and 1932

Correspondence with M.D. Schepper regarding his position as a computer at the Observatory.

NB Includes one letter from the Ministry for Education and Science.

51. Schermerhorn

16 letters, 1924-1925, 1930-1931

Correspondence with W. Schermerhorn, engineer at Delft Polytechnic (and future Prime Minister of the Netherlands) on the design (1924-25) and testing (1930-31) of the azimuth instrument.

NB: Includes forwarded letters from the instrument manufacturer, M. Hildebrand (Freiberg).

52. Schlesinger

96 letters, 1922-1934

Correspondence with Frank Schlesinger (Yale). Topics include the institutional affairs of Yale and Leiden observatories, their respective South African stations and UOJ, IAU politics, young Dutch astronomers coming to Yale or South Africa (including J.H. Oort, J. Schilt, H. van Gent and D. Brouwer), the Rockefeller grant for the Leiden telescope at Johannesburg, and plans for De Sitters lecture tour of 1931. Also includes several letters on cosmology and radial velocities of nebulae (1929).

NB: Includes forwarded correspondence from H.L. Alden (Yale Southern Station), the US consuls in Amsterdam and Ottawa, F. Dyson (Greenwich), H. van Gent (UOJ), A.W. Roberts (South African Senate), J.E. de Vos van Steenwijk (Leiden).

53. Schouten

1 letter, 1918

Letter from J.A. Schouten (Delft Polytechnic), with an attached manuscript *Over het ontstaan eener praecessiebeweging tengevolge van het niet euclidisch zyn der ruimte in de nabylheid van de zon.*

54. Shapley

28 letters, 1927-1933

Correspondence with Harlow Shapley (Harvard). Topics include the preparations for the IAU meeting in Leiden in 1928, the Rockefeller grant for the Leiden telescope at Johannesburg, relativistic explanation of big velocities of nebulae (after 1930), and several Leiden astronomers coming to Harvard (including Jan Oort).

55. Smeding

7 letters, 1918 and 1920

Correspondence with computer S.S. Smeding, on his position at the Observatory.

56. Stein

1 letter, 1931

One letter from J. Stein SJ (Vatican Observatory) asking for advice on instruments.

57. Struve

3 letters, 1929, 1933, 1934

Letters from Otto Struve (Yerkes) on various subjects. In German.

58. Tresling

2 letters, 1917

Two letters from physics student J. Tresling on general relativity.

59. Uitterdijk

1 letter, 1934

Letter from student J. Uitterdijk, concerning his visit to Vienna Observatory.

60. Vollgraff

14 letters, 1932-1934

Correspondence with science historian J.A. Vollgraff, concerning Snellius and the Huygens and Thuret clocks of the Observatory.

61. de Vos van Steenwijk

2 letters, 1930

Letters from J.E. de Vos van Steenwijk, former student from Leiden, who was looking for a job.

62. Van Wijk

8 letters, 1930 and 1932

Correspondence with W.E. van Wijk, concerning his proposal for calendar reform, and an exam on the history of timekeeping.

63. Van Wijngaarden

1 letter, 1926

Letter from amateur astronomer G. van Wijngaarden on the solar eclipse of 14 January 1926 in Medan, Sumatra.

NB: Includes 21 pictures of the eclipse, and one picture of his equipment.

63A. Verschaffel

2 letters, 1921

Two letters and some notes from A. Verschaffel, Hendaye (France).

In French

64. Wilterdink

2 letters, 1918

Letters from observer J.H. Wilterdink, regarding some personal complaints about the situation at Leiden observatory.

65. Wintner

4 letters, 1925

Letters from A. Wintner (Budapest) on general relativity.

66. Woltjer

6 letters, 1918, 1921

Letters by student (later lector) Jan Woltjer, asking for help to obtain leave from military service to finish his dissertation (1918), and on the theory of Jupiter Satellites (1921).

67. Wood

56 letters, 1928-1934

Correspondence with H.E. Wood of UOJ, on the cooperation between the observatories of Leiden and Johannesburg, and on the design and construction of the Leiden telescope in Johannesburg.

NB: Includes one letter from J.H. Oort.

68. Van der Woude

1 letter, 1917

Letter from the mathematician W. van der Woude (Leiden) on general relativity.

69. Zunderman

7 letters, 1920

Letters from H. Zunderman, instrument maker, concerning his position at the Observatory.

70. Zwiers

1 letter, 1922

One letter from the observer H.J. Zwiers to De Sitter in Florence, 1922, on Observatory matters.

Correspondence by subject: Scientific

71. Uurhoekfout

5 letters, 1907-1908

Letters from De Sitter to Leiden astronomers J.H. Wilterdink and (probably) H.G. van de Sande Bakhuyzen, regarding errors in measurements of right ascensions, and on the shortcomings of the photographic refractor. Also some notes.

72. Selected Areas

45 letters, 1921-1925

Correspondence with various astronomers on meridian observations for the Plan of Selected Areas.

Correspondents: De Sitter, B. Baillaud (Paris), J.M. Baldwin (Melbourne), F. Cohn (Recheninstitut Berlin), J. Croumet[?] (Bordeaux), J. Dick (Berlin-Babelsberg), E. Esclangon (Strasbourg), S.S. Hough (Cape of Good Hope), G. Meyer (Floriac, Bordeaux), C.D. Perrine (Observatorio Astronómico, Argentina), P.J. van Rhijn (Groningen), R.H. Tucker (Lick Observatory),

NB includes copies of letters from J.C. Kapteyn (Groningen) and I. Hartmann (La Plata). Partly in German and French.

73. Astronomisches Recheninstitut

11 letters, 1924, 1925, 1931

Correspondence concerning, among other matters, small planets and various catalogue revisions.

Correspondents: De Sitter, A. Kopff (Astr. Recheninstitut), G. Stracke (Astr. Recheninstitut). In German.

74. Schilt-photometer

29 letters, 1926-1927

Correspondence regarding Schilt Photometers, built by Zunderman in Leiden for several other observatories.

Correspondents: De Sitter, O. Bergstrand (Uppsala Observatory), .V.L. Charlier (Lund Observatory), W. Gyllenberg (Lund Observatory), W.C. 't Hart (instrument maker, Rotterdam), E. Hertzsprung, B. Lindblad (Uppsala), M. Maggini (Observatory "Vincenzo Cerulli"), H. Shapley (Harvard College Observatory), H.L. Vanderlinden (Uccle Observatory). Partly in French and German.

74A. Synchronome

2 letters, 1928

Two letters from The Synchronome Company about synchronome pendulum clocks.

75. Yale Southern Observatory

25 letters, 1927-1929

Correspondence on Jupiter plates, taken at Yale Southern Observatory, Johannesburg

Correspondents: De Sitter, H.L. Alden (Yale Southern Observatory), F. Schlesinger (Yale).

76. Philips

3 letters, 1933-1934

Letters from G. Holst and J.F.H. Custers of Philips *Natuurkundig Laboratorium*, concerning the sensitivity of various photographic plates for different wavelengths (1933).

77 Absorption

- 77.1: Absorption

5 letters, notes, 1934

Correspondence and notes concerning light absorption and reflection losses in lenses and mirrors.

Includes 3 letters from Ross Ltd., and 2 letters from a Br.v.H. of Delft (1934).

- 77.2: graph Absorption

NB: Outsize; in a separate box.

78. Schmidt galaxy maps

16 letters, 1922-1923

Correspondence regarding the publication of two maps of the galaxy, made by F.J. Schmidt of Athens Observatory (see also the correspondence with Pannekoek in inv.no. 45).

Correspondents: De Sitter, D. Eginitis (Athens), Van Leer & co. (shipping company). Partly in French.

79. Astronomical Time

9 letters, 1927-1928

Correspondence regarding De Sitter's article *On the rotation of the earth and astronomical time*. E. Rignano, editor of *Scientia*, demanded cuts, which De Sitter rejected. A manuscript with the proposed cuts is included (11pp.). Also includes correspondence with *Nature*, which published the article (1928) and a letter from D. Murray in reaction to the publication.

Correspondents: R.A. Gregory (*Nature*), J. Jackson (referee), D. Murray, E. Rignano (*Scientia*).

80. BAAS 1933

4 letters, 1933

Correspondence regarding De Sitter's participation in a meeting on the expanding universe at the meeting of the British Association for the Advancement of Science (BAAS) in 1933.

Includes a manuscript of De Sitter's *Discussion on the Expanding Universe* at that meeting (6pp.) and a manuscript *On the foundation of the theory of relativity, with special reference to the theory of the expanding universe* (8pp.).

Correspondents: De Sitter, A. Ferguson (BAAS), H. Woolidge (BAAS).

Correspondence by subject: students and visitors

81. Schilt

17 letters, 1925-1927

Correspondence concerning the plans of Dutch astronomer Jan Schilt to work at various American institutions, and on his IEB grant.

Correspondents: De Sitter, G.E. Hale (Mt. Wilson), E. Hertzsprung, W. Lund (IEB), J. Schilt, A. Trowbridge (IEB).

82. IEB fellowship Brouwer

25 letters, 1926-1927

Correspondence concerning a fellowship for student Dirk Brouwer, for a stay in Berkely.

Correspondents: De Sitter, D. Brouwer, E. Hertzsprung, O. Leuschner (Berkely), F. Schlesinger (Yale), W.E. Tisdale (National Research Council / IEB), A. Trowbridge (IEB).

83. A. de Sitter

8 Letters, 1930-1931

Correspondence regarding a fellowship at Yerkes for De Sitters' son Aernout.

Correspondents: De Sitter, E.B. Frost (Yerkes), J. Ohlson (Rockefeller Foundation), W.E. Tisdale (Rockefeller Foundation).

84. Oosterhoff

22 letters, 1928 and 1933-1934

Correspondence regarding student Piet Th. Oosterhoff's planned work at Harvard and Mt. Wilson Observatories. The correspondence is primarily concerned with administrative and financial issues.

Includes one letter from J. Oosterhoff, father of Piet who asked De Sitter about his view on the future of his son (1928).

Correspondents: De Sitter, W.S. Adams (Mt. Wilson), E. Hertzsprung, J. Oosterhoff, P.Th. Oosterhoff, H. Shapley (Harvard), H.M. Miller (Rockefeller Foundation).

85. Rybka

9 letters 1929, 1931, 1933

Correspondence regarding a stay of E. Rybka at Leyden Observatory, and on the shipping of some photographic plates to Poland. Rybka also asked permission to translate an article from De Sitter on the expanding universe into Polish.

Correspondents: De Sitter, M. Kamensky (Warsaw observatory), E. Rybka (Warsaw), W. Babinski (Polish embassy). Partly in French.

86. Mohr

7 letters, 1930

Correspondence with J.M. Mohr on his plans to visit Leiden, to study stars with high-velocities. Includes several letters of recommendation.

Correspondents: De Sitter, H. Deslandres (Paris), W.W. Heinrich (Prague), J.M. Mohr (Bratislava), F. Nusl (Prague), P.J.van Rhijn (Groningen). Partly in French and German.

87. Beer

5 letters, 1934

Correspondence regarding A. Beer, political refugee from Germany. He eventually got a position in Cambridge, with help from De Sitter.

Correspondents: H. Frijda (Academisch Steunfonds), A. Kopff (Astr. Recheninstitut Berlin), A. Pannekoek (Amsterdam). Partly in German.

88. Bruna

4 letters, 1934

Correspondence concerning exams of student J.J. Bruna.

Correspondents: De Sitter, A.D. Fokker (Haarlem), J.J. Bruna.

89. Veldt

3 letters, 1934

Letters concerning student D. Veldt. De Sitter recommends him to J. Tinbergen and to the *Stichting tot verruiming van werkgelegenheid voor academisch gevormden* ('foundation for the expansion of employment of university graduates').

Correspondents: De Sitter, N.J. Krom (*Stichting tot verruiming etc.*).

Correspondence by subject: non-scientific

90. British Astronomical Association

12 letters, 1933

Correspondence regarding the exact dates of Huygens' astronomical discoveries, and an overview of ongoing astronomical work in the Netherlands.

Correspondents: De Sitter, M.G. Evereshed (BAA), W.A. Farr (BAA), J. Stokley (Franklin Institute).

91. Cosmos

- 91.1 English publication, 15 letters, 1931-1933

Correspondence on the publication of *Cosmos* by Harvard University Press.

Correspondents: De Sitter, A.H. Joy (Mt. Wilson), H. Murdock (Harvard), D.T. Pottinger (Harvard University Press), H. Shapley (Harvard), W. Warren Smith jr (Harvard University Press).

- 91.2 Dutch translation, 19 letters, 1934

Correspondence on the Dutch translation of *Cosmos*.

Correspondents: De Sitter, H. Beer (The Hague), J.C. Proost-Thoden van Velzen (translator), W.P. van Stockum (publisher).

- 91.3 Other translations, 14 letters, 1932-1934

Correspondence on the publication of Japanese, Swedish and French translations of *Cosmos*.

Correspondents: De Sitter, K. Araki (Kurashiki), S. Asklöf (Stockholm), H. Milford (Oxford University Press).

92. Hitchcock and Lowell lectures

24 letters, 1932-1933

Correspondence regarding the publication of the Hitchcock Lectures (Berkeley, 1933) and the Lowell lectures (Harvard, 1932). Includes manuscripts of *The astronomical aspects of the theory of relativity* (Hitchcock Lecture, heavily annotated, 16pp.), *The Size of the Universe* (15pp.) and several other manuscripts.

Also includes an address lists of scientists and scientific institutions (for sending them copies of the publications).

Correspondents: De Sitter, G. Calhoun (University of California Press), D.S. Grafton, A.H. Joy (Mt. Wilson), D.N. Lehmer, A.O. Leuschner (University of California Press), D. Pottinger (Harvard University Press).

93. Foundations

- 93.1 Kaiserfonds

6 letters, 1917-1919

Correspondence regarding the plans to transfer the administration of the *Kaiserfonds* to the *Leidsch Universiteitsfonds*.

Correspondents: De Sitter, H.G. van de Sande Bakhuyzen, Leidsch Universiteitsfonds.

- 93.2 Leidsch Universiteitsfonds

6 letters, 1922-1923

Correspondence with the *Leidsch Universiteitsfonds* regarding the funding of the publication of some observations of H.G. van de Sande Bakhuyzen, and of traveling costs for Leiden astronomers to South Africa.

Correspondents: De Sitter, Leidsch Universiteitsfonds, Bachiene Stichting.

- 93.3 Leidsch Sterrewachtfonds

8 letters, 1933

Correspondence with the Leiden Observatory Foundation, on funding requests for . One request regards an assistantship for student W.Chr. Martin. Also a letter from *Genootschap Noorthey*, turning down a funding request.

Correspondents: De Sitter, G. Vissering (Leidsch Sterrewachtfonds), [?] Bijleveld (Genootschap Noorthey).

- 93.4 Kapteyn Fonds

2 letters 1924-25

Two letters from H.J. Bakcker about fund raising for Sterrenkundig Studiefonds J.C. Kapteyn.

94. Bosscha observatory

7 letters, 1920-1921

Correspondence regarding the founding of an observatory in the Dutch East Indies, esp. on the financial side of the matter. Includes drafts of letters by De Sitter to K.A.R. Bosscha, who financed the observatory.

Correspondents: De Sitter, W.C. Beuker Andreae, K.P. van der Mandele.

95. Absolute Declinations

4 letters, 1922 and 1927

Correspondence regarding the funding of Sanders' absolute declination research program in Matuba, by the *Pieter Langenhuizen fonds* of the *Hollandse Maatschappij van Wetenschappen*.

96. Russian eclipse expedition

16 letters, 1928-1929

Correspondence regarding the organization (esp. visa) of an expedition by four Pulkowa astronomers, to observe the total solar eclipse of 9 may 1929 on Sumatra. The visa were obtained, but expedition was cancelled.

Correspondents: De Sitter, Beucker Andreae (ministry of Foreign Affairs), A.N. Deutsch, A. Ivanoff, E. Perepelkin, F. Renz and G.A. Tichov (all Pulkowa). Partly in French.

97. Willebrord Snellius

6 letters, 1928-1929

Correspondence regarding a research ship of the Navy, named after Willebrord Snellius. The university provided a portrait of Snellius, as a token of their support of naval scientific and geographical research.

Correspondents: De Sitter, J. Luymes.

98. Bruce Medal

2 letters, 1931

Correspondence with the Astronomical Society of the Pacific on the presentation of the Bruce medal to De Sitter.

Correspondents: De Sitter, C.N. Adams (Astronomical Society of the Pacific).

99. Radcliffe Observatory

17 letters, 1931-1934

Correspondence regarding the plan to move Radcliffe Observatory from Oxford to South Africa. Includes several drafts for affidavits by De Sitter, stating his (favorable) views on the plan.

Correspondents: De Sitter, H. Knox Shaw (Radcliffe Observatory), J.W. Dyson (Greenwich).

99A. Penn anniversary

7 letters, 1932

Correspondence regarding the celebration of the 150th anniversary of the landing of William Penn in America. The Franklin Institute of Philadelphia wanted to illuminate a portrait of Penn with starlight. De Sitter corresponded about the possibilities with Philips NV, but eventually the plan was cancelled.

Correspondents: De Sitter, J. Stokley (Franklin Institute PA), G. Holst (Philips), J. van der Mark (Philips).

100. AAAS Chicago 1933

8 letters, 1932-1933

Correspondence regarding an invitation to De Sitter to the 1933 meeting of the American Association for the Advancement of Science (AAAS) and the International Exhibition *A Century of Progress* in Chicago. De Sitter declined.

Correspondents: De Sitter, J.J. Abel and R.C. Dawes (A Century of Progress/AAAS), Ph. Fox (Adler Planetarium), Ch.F. Roos (AAAS).

101. Brown University

5 letters, 1932-1933

Correspondence regarding the honorary degree that Brown University, Providence, Rhode Island, conferred upon De Sitter, provided that he came to receive it in person. De Sitter regretfully declined.

Correspondents: De Sitter, C.A. Barbour (Brown University), R.G.D. Richardson (Brown University).

102. *Varii* 1922-1930

Various letters, sent to De Sitter or the Observatory. These letters cover a wide range of topics. Recurrent themes are: information for the press; exchange of publications with foreign institutions; visits to Leiden; career advice to (parents of) astronomy students; and the occasional letter claiming to present a fundamental new theory of the universe.

103. *Varii* 1931

Cf. inv. no. 102.

104. *Varii* 1932

Cf. inv. no. 102.

105. *Varii* 1933

Cf. inv. no. 102.

106. *Varii* 1934

Cf. inv. no. 102.

Manuscripts and notes: courses followed by De Sitter

107. course Kapteyn

Two notebooks: *Mechanica II* and *Mechanica III*, with notes by De Sitter of a course Mechanics by J.C. Kapteyn, 1894-1895.

108 Notes 1894-1898

Notes and abstracts on mathematical subjects from De Sitter's student years in Groningen (1894-1898).

- 108.1 **Index (by De Sitter)**
- 108.2 *I Merkwaardige punten en lijnen van den driehoek (October 1894)*
- 108.3 *II Constructie van een rationeele cubische kromme door zijn dubbelpunt en zes andere punten (October 94)*
- 108.4 *III Commandant Defforges over correcties bij slingerexperimenten. Excerpt uit Journal de Physique (October 94)*
- 108.5 *IV Excerpt uit Journal de Physique 1893 p. 289 (October 1894)*
- 108.6 *V₁, V₂ [twee modellen van Riemannsche vlakken] ('95 april)*
- 108.7 *VI Neumann, über Riemann's Theorie (95 Juni)*
- 108.8 *VII Gauss Conforme Afbeelding (1895 Juli)*
- 108.9 *VIII C.F. Gauss, Disquisitiones generales circa Superficies Curvas (Juli 95)*
- 108.10 *IX Enumeratio linearum quarti ordinis (Aug. 95)*
- 108.11 *X Vergelijking van Riccati (95. October)*
- 108.12 *XI Gilbertsche factor (1895 Nov.)*
- 108.13 *XII Excerpt etc. Part. Diff. verg. 1e O (1895 Nov. en Dec.)*
- 108.14 *XIII Linear operators (95 Dec)*
- 108.15 *XIV Oneindigheid en irrationeele getallen (Jan 96)*
- 108.16 *XV Fundamentele vergelijkingen van de theorie van Maxwell (Jan 96)*
- 108.17 *XVI Dupinsche Cyclide (96 Mei)*
- 108.18 *XVII Voorbeeld van een configuratie $\binom{16}{6} \binom{16}{6}$ met alle elementen bestaanbaar (1896 Juni)*
- 108.19 *XVIII Constructie van een C^3 door 9 willekeurig gegeven punten (1896 Juni)*
- 108.20 *XIX Rudolf Friedrich Alfred Clebsch, Theorie der binären algebraischen Formen (1896 Aug.)*
- 108.21 *XX Critiek op "Dr. B. Erdmann, Die Axiome der Geometrie" (1896 Aug.)*
NB: contains a note by De Sitter on philosophy of science.
- 108.22 *XXI Lie, Partieele differentiaalvergelijkingen eerste orde (Nov. 96)*
- 108.23 *XXII Electromagnetische eenheden (Febr. 97)*
- 108.24 *XXIII Simon Newcomb over energie en arbeid (Febr. 97.)*
- 108.25 *XXIV Model v/e ontwikkelbaar oppervlak (Mrt 1897)*

109. Fundamenten der meetkunde

Notes on the 'foundations of geometry', not dated.

110. Strophoide

Notes (1897).

NB: Includes a letter from P.H. Schoute (mathematics professor in Groningen), (1898).

111. Course Lorentz 1927-1928

Notes by De Sitter from a course on wave mechanics, taught by H.A. Lorentz in 1927-1928,. Also includes a summary by Lorentz of one course meeting that De Sitter missed, with an accompanying letter from Lorentz.

Manuscripts and notes: courses taught by De Sitter

112. *kl. quadraten*

Manuscript for course *Theorie der berekening van waarnemingen* (theory of the computing of observations) (23pp., 1928), and accompanying notes. The envelope containing these papers referred to a course '*kl. quadraten*' (least squares).

113. Stellar statistics

Course notes (not dated).

114. Jupiter Satellites

Course notes (not dated).

115. Stellar astronomy

Course notes, 1924-1925.

116. *Evolutie der sterren*

Notes on stellar evolution (17pp., not dated)). Probably course notes.

117. *Algemeen college astronomie*

Notebook with notes for a course on general astronomy, by De Sitter (1927-1928).

118. *Voorbeeldberekeningen*

Manuscripts (11pp.) with examples of calculations for the determination of orbits from three observations, from four observations, and for the determination of parabolic orbits with Oters' method (not dated).

119. *Elementair college*

Notes for the *Elementair college* (basic course) 1928-1929, and programs for the course in subsequent years, until 1934-35. Also includes lists of students who attended the course in 1927-1934, with the results of the oral exams of the classes of 1928-1930 written on the reverse side.

Manuscripts and notes: Studies

Notebooks, marked S1-S26. S stands for *Studies*. The descriptions in italics are transcribed from the table of contents (inv.no. 120). Each notebook is dated and provided with a table of contents by De Sitter.

120. *Inhoud der boeken S*

Table of contents of notebooks S1-S26, by De Sitter.

121. Notebook S1

1901-1905 *Theoretisch-mathematische questies*
 Periodieke soluties
 Theorie der [Jupiter] satellieten

122. Notebook S2

1903-1924 *Verskillende questies betreffende baanbepaling*
 Periodische soluties

Relativiteit Theorie
Absorptie van gravitatie
Verskillende questies
Overzicht van Kapteyn's werk
Theorie van Clairvant

NB: Includes a letter from H.P. Hollis (Greenwich) 1912 (at p.95).

123. Notebook S3

1910-1913 *Theorie der [Jupiter] satellieten*
Gasbollen
Kanonieke elementen

124. Notebook S4

1911-1916 *Theorie der [Jupiter] satellieten*

125. Notebook S5

1912-1914 *Schaduwovergangen*
Theorie der [Jupiter] satellieten

126. Notebook S6

1914-1915 *Theorie der [Jupiter] satellieten (vervolg van S5)*
Theorie van Clairvant. Isostasien

127. Notebook S7

1901-1905 *Jupiter-satellieten (discussies van obs.)*
Brief aan Gill Mei 1905

128. Notebook S8

1908-1912 *Varia - Stellair*
Relativiteit

NB: Also contains a draft for De Sitter's inaugural lecture (1908).

NB: Includes a small paper with notes by H.A. Lorentz on relativity theory (at p.87), three letters by F. Cohen (1910) (at p.75 and 79) and two letters by J.D. van der Waals jr (1911) (at p. 139).

129. Notebook S9

1913-1926 *Discussies Jupiter-satellieten platen*
Breedtes – lengtes

NB: Includes one letter by C. de Jong (1916) (at p.53) and one letter by L.J. Comrie (1926) (at p.143).

130. Notebook S10

1915-1918 *Theorie der [Jupiter] satellieten (vervolg van S6)*

131. Notebook S11

1916-1927 *Discussie van Innes's observaties [Jupiter] satellieten (lengten der [Jupiter]satellieten)*
lengtes van [Zon, Mercurius, Venus, Maan]

NB: Includes two letters by J. Jackson (1927) (at p.117 and 129).

132. Notebook S12

1902?-1916 *Varia*

Kleinste quadraten

Relativiteit (algemeene theorie)

NB: Includes one letter by E.F. van de Sande Bakhuyzen (not dated) (at p.17) and an original (i.e. not a copy or a draft) letter by De Sitter to A. Einstein (1916) (at p.239).

133. Notebook S13

1904-1906 *Theorie der [Jupiter] satellieten*

Discussies over Libratie (voor Gr.Publ.17)

134. Notebook S14

1904-1906 *Waarnemingen (oude) Kaapsche [Jupiter]-platen*

135. Notebook S15

1905-1912 *Periodieke soluties*

1924 *Isostasie*

136. Notebook S16

1905-1906 *Discussies Jupiter-satellieten (hellingen)*

137. Notebook S17

1906-1907 *discussies Jupitersatellieten (vervolg van S16)*

Excentriciteit-libratie

138. Notebook S18

1906-1915 *Differentiaal Theorie (Gr.Publ.17)*

Discussies

Stabiliteit der per.sol. in [Jupiter] systeem

139. Notebook S19

1907-1909 *Discussies [Jupiter] satellieten*

140. Notebook S20

1907-1912 *Jupiter-satellieten*

141. Notebook S21

1919- *Analytische Theorie der [Jupiter] satellieten*

(klad M.S.)

Achterin methode v. Zeipel

142. Notebook S22

1919-1924 *Theorie der [Jupiter] satellieten*

Methode v. Zeipel

143 Notebook S23

1921-1927 *Absolute declinatiebepalingen.*

Rotatie v/d aarde

Eclips 29 juni 1927

Platen Johannesburg 1927

Varia
Getijden op Jupiter

NB: Includes one letter by E.W. Brown (1927) (at p.97) and one letter by J.K. Fotheringham (1927) (at p.107).

144. Notebook S24

1922-1929 *Discussies Jupiterplaten*
 Discussie van lengtes (XVI.2)
 Discussies van oude eclipsen (XVI.3)

NB: Notebook is continued on separate sheets.

145. Notebook S25

1924- *Varia*

NB: Includes one letter by J.D. van der Waals jr (1924) (at p.3).

146. Notebook S26

1926- *Theorie der [Jupiter] satellieten (breedtes)*

NB: Includes one letter from D. Brouwer to H. Jeffreys (1952) (separate).

Manuscripts and notes: General Relativity and Cosmology

147. Notes S12

Notes on general relativity, referring to notebook S12 (inv.no.132).

148. Monthly Notices 1917

Manuscript: *On Einstein's theory of gravitation and its astronomical consequences, Second Paper*, Monthly Notices (14pp., 1917; incomplete).

149. Rotating spherical body

Manuscript (6pp.) and notes on *The field-equations of a rotating spherical body*.

150. Spiraalnevels

- 150.1 Correspondence

6 letters, 1930

Correspondence regarding De Sitter's publications on the expanding universe (the file is called 'spiral nebulae').

Correspondents: De Sitter (to R.C. Tolman, 1930), P. Bonetti, H.J.C.G. Eilbracht[?], L. van de Geer, O. Heckmann. Partly in German.

- 150.2 BAN 223

Notes for the article *Some further computations regarding non-static universes* (BAN 223, 1931).

- 150.3 Notes

Notes on the distance-velocity relation of spiral nebulae.

- 150.4 De Sitter's Universe

78 numbered manuscript pages and about as much sheets with notes, graphs and calculations, titled *Inertiaalbeweging in 'De Sitter's Universe'*: on the velocity, density, distances, distribution etc. of (spiral) nebulae, and the expanding universe.

NB: Includes two letters from J.C. Kluyver and one from de Sitter (1930).

- 150.5 Notes

Notes on general relativity and expanding universes.

- 150.6 BAN 200

Notes for the article '*Further remarks on the astronomical consequences of the theory of the expanding universe*' (BAN 200, 1930).

150A. American notebook

Notebook with notes on general relativity and cosmology, presumably started during De Sitter's American lecture tour. The notebook in inv.no. 151 is probably the continuation of this one. Starting at the back: notes and excerpts of literature for the Lowell Lectures, and a diary of De Sitter's American lecture tour, including notes on conversations with American scientists, 1931-32.

151. General relativity notebook

Notebook with notes on general relativity and cosmology (1932-1933).

152. Conversation Eddington

Notes on a conversation with Eddington on cosmology, dated 14 May 1933.

153. BAN 249

Notes, 1933

Calculations regarding *On the motion and the mutual perturbations of material particles in an expanding universe* (BAN 249, 1933).

154. BAN 261

Notes for article *On distance, magnitude, and related quantities in an expanding universe* (BAN 261, 1934).

155. Expanding Universes

Notes and calculations on different expanding universe models (not dated).

156. Notes general relativity

Two sheets of notes on General Relativity, and two pages from a manuscript on Relativity Theory (not dated; originally from different files).

Manuscripts and notes: Jupiter Satellites

157. Cookson

Handwritten copy (16pp.) of an article by Cookson, according to a remark in the margin received in September 1900.

158. Index Jupiter plates

Index of folios regarding Jupiter plates 1891, 1903, 1904.

159. Libraties [Selection]

Calculations regarding Cape plates 1891: index in 158
[extracted: calculations 1892-1898]

NB: Outsize; in separate box.

160. General notes on photographs [Selection]

Notes concerning Jupiter plates, 1903.

161. Waarnemingen Innes [Selection]

Notes concerning observations of Jupiter Satellites by R.T.A. Innes.

- 161.1

I *Innes' waarnemingen Satellieten van Jupiter 1908-1926; Berekeningen t/m konditievergelijkingen* (introduction and the table of contents).

- 161.2

II *Diverse papieren Innes' eklipsen. Voornamelijk [sic] betreffende de berekening van de theoretische plaats, controle-rekeningen enz. Ook heel wat waardeloos geworden berekeningen* (introduction).

- 161.3

Notebook *Diskussie Innes 1908-1913 III, IV.*

162. Jupiter satellites 1901

Manuscript *The Orbits of Jupiter's Satellites* in *The Observer*, 1901 (5pp). At the back, De Sitter wrote 'Antwoord op Sampson's critiek' (Answer to Sampson's criticism). Includes some notes.

163. Proof dissertation I

Two corrected copies of *Discussion of Heliometer-observations of Jupiter's Satellites* (1901).

164. Proof dissertation II

Second proof of *discussion of Heliometer-observations of Jupiter's Satellites, made by Sir David Gill and W.H.Finlay M.A. by W. de Sitter* (1901), with corrections, and a manuscript of the second chapter: *Computation of Tabular Places and Equation of Condition.*

NB: outsize; stored in a separate box.

165. Jupiter satellites 1905

Manuscript *Over de libratie der drie binnenste groote satellieten van Jupiter, en eene nieuwe methode ter bepaling van de massa van Satelliet I* (5pp., 1905).

166. proof prints 1906

Proof prints of the *Annals of the Royal Observatory, Cape of Good Hope*, 1906, containing De Sitter's article *A Determination of the inclinations and nodes of the Orbits of Jupiter's Satellites*. With notes and corrections by De Sitter. Also includes an extra copy of pages 105-120, again with corrections.

167. Rekeningen voor Theorie der Jupiter-satellieten [selection]

Notes [selection]

Includes a table of content (*Inhoud der vellen Q*) and a list of 'candidate' students, 1905-1911.

168. tables of Jupiter Satellites [Selection]

Notes *Massa's en baanelementen, K. Akad. Maart 1908.*

169. Waarnemingen Kaapsche Platen der Jupiter-Satellieten

Notebook with notes concerning observations from the Cape, dated 1914-1915.

170. Greenwich 1918-1919 [Selection]

Index and notes (reductions) of plates of Jupiter satellites from Greenwich Observatory, file A (from A-H).

171. Outlines

Annalen van de Sterrewacht te Leiden XII.1: De Sitter, *Outlines of a new mathematical theory of Jupiter's Satellites* (1918), with notes in the margin.

172. Oude eclipsen I [Selection]

Notes on Jupiter satellite observations from old sources (18th century), including notes on the telescopes used for these observations.

173. Oude eclipsen II [Selection]

Notes concerning systematic corrections applied to old Jupiter satellite observations from various observatories.

NB: Includes two letters from F.W. Dyson (1929).

174. J.Th. Index, Tafels etc

Index of notes on Jupiter theory, and several tables and notes.

175. J.Th.1 Theorie der Jupiter-satallieten A. 1918

Notebook on the theory of Jupiter's Satellites. The last entries are dated 1928 and 1931.

176. J.Th.2 Berekening der coëff. van Laplace

Notes and calculations.

177. J.Th.3 Intermediaire baan en variaties

- 177.1 Parts 1-2

- 177.2 Parts 3-5

Notes and calculations.

178. J.Th.4 Theorie der Jupitersatellieten B.1918

Notebook

179. J.Th.5 Ontwikkeling naar massas (variaties)

Notes and calculations.

180. J.Th.6 "Storingen"

Notes, probably by J. Woltjer.

181. J.Th.7 E=1-6

Notebook, 1918

182. J.Th.8 E=7-10

Notebook

183. J.Th.9 E=11-15

Notebook

184. J.Th.10 E=16-18

Notebook

185. J.Th.11 Correctie v/d determinant wegens “storingen”

- 185.1 Parts 1-7

- 185.2 Parts 8-19

Notes and calculations, referring to notebooks S10 and S22 (inv. no. 130 and 142).
Probably in part by J. Woltjer.

186. J.Th.12

Notebook

187. J.Th.13 “Storingen”, methode v. Zeipel

- 187.1 Parts 1-8

- 187.2 Parts 9-13

Notes and calculations.

188. J.Th.14 Storingsfunctie \bar{R} -[R] E=1,2,3,4

Notebook

189. J.Th.15 Storingsfunctie \bar{R} -[R] E=1,2,3,4

Notebook, referring to notebook S22 (inv. no. 142).

190. J.Th.16: theorie der Jupitersatellieten, Termen 2^e en 3^e graad

- 190.1 Parts 1-4

- 190.2 Parts 5-16

Notes and calculations.

191. J.Th. 17. Theorie der Jupitersatellieten “storingen” nieuwe methode.

Notebook, referring to notebook S22 (inv. no. 142).

192. J.Th.18 Berekeningen voor methode 1931

Notes and calculations.

Manuscripts and notes: other

193. Mars

Notes on Mars, esp. the ‘canals’, and a reprint of De Sitters article on Mars in *De Natuur* (1908).

194. Hyaden [Selection]

Notes on the Hyades star cluster, with special attention to the work of J.C. Kapteyn and L. Boss.

NB: Includes a letter from J.C. Kapteyn, 1915.

195. Absolute Declinaties

Notes on absolute declinations.

196. Polar stars

Notes concerning a catalogue of stars within 2 degrees of the North Pole (not dated).

197. Bahnbestimmung

Manuscript (9pp.) '*Vergleichende Darstellung der Methode von Gauss-Encke, Tietin[?] und Gibbs zur Bahnbestimmung aus drei Beobachtungen, von Dr. W. De Sitter* (not dated). In German.

198. Klok en hamerspel

Notes on probability in the game 'clock and hammer' (not dated).

199. Θ [Selection]

Calculations related to notebook S11.

- **199.1 [Sun]**

- **199.2 $\Theta.0$ Berekening ten behoeve van de discussie S9. pp 136-139**

- **199.3 $\Theta.1$**

- **199.4 $\Theta.2$**

NB: the original folder also contained files [*Mercury*], [*Moon*], [*Residus*], and $\Theta 3 - \Theta 12$.

200. Fundamenteele astronomie

Notebook on *Questies en discussies over fundamenteele astronomie* (1923).

200A. Notes on instruments

Notebook with (technical) notes concerning the chronometers of the observatory, and the *arceerkijker*, c. 1924.

201. Afplating van de aarde

Two manuscripts (14pp.) and notes on the shape of the earth, and a copy of BAN 55 (1924), containing the article *On the flattening and the constitution of the earth* by De Sitter.

NB: Includes a letter from C.A. van den Bosch, 1924.

202. 'Ontwikkeling van a'/Δ tot en met x^6 '

Rolled-up sheet.

NB: in a separate box.

203. 'Samenhang van constanten'

Notebook with notes on astronomical and physical constants (velocity of light, precession etc.) and their relations (1922-1934). Includes a note on the possibility of publishing a book on constants. Also includes a list of constants, transcribed from this notebook by H.A.

Kluyver, a student who acted as De Sitter's secretary.

204. Celestial mechanics

Notes (not dated) on celestial mechanics. References are made to articles *On the flattening and the constitution of the Earth*, (BAN 55, 1924), *On the secular accelerations and the fluctuations of the longitudes of the moon, the sun, mercury and Venus*, BAN 124 (1927) and *On the longitude of the sun in the years 1964-1900*, (BAN 127, 1927).

NB: Includes letters from F.W. Dyson (Greenwich) and H. Spencer Jones (Cape), both 1929.

205. South Africa 1929 / theory of the universe

Notebook with various notes (1932-1934). Topics include non-euclidian geometry, Robb and Milne theories, and a page on *Grondhypothesen van theorie van het heelal* ('fundamental hypotheses of a theory of the universe').

Starting at the back of the notebook: a diary by De Sitter from his journey to the meeting of the British Association for the Advancement of Science in South Africa (1929).

206. Origin of the Solar System

Notes (c. 1929-1932) on various articles and theories on the origin of the solar system, esp. on publications by H. Jeffreys. One sheet refers to notebook S25 (inv.nr. 196), p 13-18.

Includes a manuscript: *The Origin of the Planetary system'* (3pp), probably a lecture from De Sitters lecture tour in the US, 1931-1932 (one of the papers is dated 'Los Angeles, 5/1/32').

207. Lowell lectures

Transcripts by an anonymous reporter, of De Sitter's Lowell lectures of 10 (in twofold), 13 and 14 November 1931, with an accompanying letter by D.T. Pottinger.

208. Corrections to *Kosmos*

Manuscript (13pp.): *Misprints in and corrections to "Kosmos"*.

209. Extragalactic Nebulae

Notes on the Shapley-Ames catalogue of extragalactic nebulae. Includes folders marked *magnitudes*, *afplattingen*, and a manuscript *Extragalactische nevels* (1934).

NB: Includes one letter from Harlow Shapley (Harvard) (1933).

210. Fundamental constants

Manuscript *The system of fundamental constants* (6pp., 1932).

211. History of the Observatory

Notes by De Sitter and others for the *Short history of the observatory of the university at Leiden* (1933). Includes a letter by M.G. Evereshed (1934).

212. Miscellaneous notes 1

Various notes. Includes:

- a reconstruction of Snellius' triangulation of Leiden in 1617 (with large drawing).
- notes by J. Woltjer of a course on stellar physics (1925).
- notes marked 'Kramers 1929'.
- various notes on the work of Jordan, Oort, H. Spencer Jones, Maxwell.
- notes on the rotation of the earth, marked 'B.A. Capetown, July 25, 1929', and on Jupiter Satellites, marked 'Johbg, 1 Aug. 1929'.
- transcriptions of quotes from William Kingdon Clifford, Newton, Eddington and Huxley.

213. Miscellaneous notes 2

Various notes, including some letters, a small sheet notes with estimates of the effects of melting polar ice; manuscript *Corrections à appliquer au temps astronomique pour le changer en temps Newtonian ou uniforme, par W. de Sitter*; some extracts from the Nautical Almanac 1926.

NB: Includes, two letters from J.K. Fotheringham (1927) and a letter by C. Schoch (1927).

214. Miscellaneous notes 3

Various notes, including a copy of BAN 130 (1927), with corrections by De Sitter in his article *Further note on the causes of the discontinuous changes of the earth's rotation and their possible effect on the intensity of gravity*.

NB: Includes a letter from student A.J. Leckie (1918), and a letter from C.G.G. van Herk (1933), with an attached manuscript.

Committees

215 Eclipse Committee

Papers concerning the Eclipse committee of the Royal Academy of Sciences, of which De Sitter was a member and from 1928 chairman.

- 215.1 Address 1914

Address (3pp., 1914) by Jan van der Bilt (secretary of the Committee) to the Minister of Science, pleading for funding of eclipse observations.

- 215.2. General correspondence

22 letters, 1925-1934

General correspondence and minutes of the meetings of the Committee.

Correspondents: De Sitter, S. van den Bergh, J. van der Bilt, M. Minnaert.

- 215.3 Eclipse 1926

Four reports of the Committee on the eclipse of 1926.

- 215.4 Eclipse committee - expedition 1929

35 letters, 1928-1929

Correspondence concerning the eclipse expedition of 1929 to Sumatra. Mainly letters from J. van der Bilt, secretary of the committee.

Correspondents: De Sitter, J. van der Bilt, J. Clay, N.W. Doorn, E. van Everdingen, C.J.

Gorter, [?] Knol, G.P. Kuiper, M. Minnaert, A. Pannekoek.

- 215.5 Eclipse committee - finance 1929

Correspondence and other papers concerning the finance and funding of the 1929 expedition.

Correspondents: J. Clay, J.Th. Erb, C. Feith and J. van L.[?].

Includes drafts of the program and the budget, a map of northern Sumatra, and some miscellanea.

- 215.6. Eclipse committee - report 1929

Report (49pp.) to the Royal Academy by J. van der Bilt, secretary of the Eclipse Committee, on personal and organizational difficulties during the expedition. With an accompanying letter by Van der Bilt and some notes by De Sitter.

216. Geodetische commissie

Correspondence and minutes of the Geodetic Committee (1923-1934), also known as the *Rijkscommissie voor Graadmeting en Waterpassing*, and the International Geodetic and Geophysical Union.

Correspondents: De Sitter, C. Braak, gen. G.-A. Ferrié, H.J. Heuvelink, C. de Jong, J.J.A. Muller, A. Vening Meinesz. Partly in French.

217. Nederlandsche Astronomenclub

26 letters, 1925, 1927-1929, 1932-1933

Correspondence regarding the Dutch Astronomical Society, both concerning the functioning of the Society itself and the topics discussed during the meetings.

Correspondents: De Sitter, J. van der Bilt, A.A. Nijland, J.H. Oort, P.J. van Rhijn, J. Stein SJ, J.E. de Vos van Steenwijk.

218. *Nederlandsch Historisch Natuurwetenschappelijk Museum*

15 letters, 1927-1934

Correspondence and other papers regarding the Dutch Museum for the History of Science.

Correspondents: De Sitter, H.J. Backer, C.A. Crommelin.

219. *Huygensviering*

24 letters, 1928-1929

Correspondence regarding the celebration of the 300th birthday of Christiaan Huygens, on 13 April 1929, and the accompanying Huygens exhibition in the Observatory. Includes a catalogue of the exhibition (in French) and a list of invited guests (11pp).

Correspondents: De Sitter, C.A. Crommelin, P. Ditzhuizen, A.F. Holleman, D. Korteweg, F. Muller[?], E. Picard, G. Röell, F. Schuh, C. van Vollenhove, J.A. Vollgraff, F.C. Wieder, W. Van der Woude, P. Zeeman.

Partly in French.

220. Luik Exhibition

- 220.1 Correspondence

29 letters, 1929-1931

Correspondence and other papers regarding the contribution of Dutch astronomers for the International Exhibition in Luik (Liège) in 1930. Includes minutes of the meetings of the committee preparing the Dutch contribution, and the Royal Decrees convening and dismissing committee.

Correspondents: De Sitter, J. van der Bilt, J. Duesberg and C. de Smeth, P. de Haan, J. van der Hoeven, E. De Kruyff, A.A. Nijland, A. Pannekoek, P.J. van Rhijn, C. Seitzl. Partly in French.

- 220.2 Manuscripts

Several manuscripts with descriptions of Leiden observatory, its instruments and its history, for the Luik Exhibition. Also some drawings of the design of the exhibition.

- 220.3 Drawing

Design of the exhibition.

NB in a separate box: outside.

221. *KNMI*

Correspondence and other papers of the Board of Trustees of the *Koninklijk Nederlands Meteorologisch Instituut* (Royal Netherlands Meteorological Institute), of which De Sitter was a member (1929-1934).

Correspondents: D. van Gulik, W. Wolthers.

222. *Nederlandsch Zuid-Afrikaansche Vereeniging*

47 letters, 1929-1934

Correspondence regarding the Dutch South African Society, of which De Sitter was a member. Most of the letters are concerned with summer courses in Leiden for South African students.

Correspondents: P.J. Idenburg, N.J. Krom, [Lamrock?], H.A. Lorentz [NB: the diplomat and explorer, not the physicist], G.A.F. Molegraaff and F.D.L. Gunning.

Observatory management

223. Diary 1918

Diary of 3 March – 1 July 1918, the period just after the death of E.F. van de Sande Bakhuyzen. (The red numbers were added later; they refer to documents in inv.no. 247.)

224. Reorganisation 1918-1919

76 letters, 1918-1919

- 224.1 1918 March - August

- 224.2 1918 September - 1919

File '*Korte geschiedenis van en correspondentie betreffende de reorganisatie v/d Sterrewacht 1918-19*', containing correspondence and other papers concerning the appointment of De Sitter as director of the Observatory and of E. Hertzsprung and A. Pannekoek as deputy directors, and their plans for the reorganization of the Observatory.

Includes a manuscript (draft) *Verslag omtrent den staat van den Sterrewacht te Leiden en de aldaar volbrachte waarnemingen in April 1918*; a report on the state of the observatory, (14pp., 17 April 1918); and a draft of a letter to the Trustees, in which De Sitter states his terms for accepting the directorship of the Observatory (6pp., 19 April 1918).

Correspondents: De Sitter (mostly drafts), J.E. Boddaert, C. Feith, N.Ch. de Gijsselaar, E. Hertzsprung, C. de Jong, J.C. Kapteyn, W. Kapteyn, J. Oppenheim, A. Pannekoek, H.G. van de Sande Bakhuyzen, H. Struve, J.P. de Visser, A.C. Visser van IJzendoorn, J.E. de Vos van Steenwijk.

225. Weeder

15 letters, 1918-1923 and 1931

Papers and correspondence concerning the position of J. Weeder, *conservator* (staff member) at the Observatory, who was eventually fired in 1923. Includes some notes from De Sitter of interviews with Weeder. Also three letters on the inheritance of J.H. Wilterdink.

Correspondents: De Sitter, the Board of Trustees of Leiden University, H.A. Lorentz, A.A. Nijland, J. Oppenheim, J. Weeder.

226. Wijkmans

3 letters, 1919 and 1921

Correspondence regarding the illness of computer C.H. Wijkmans.

Correspondents: De Sitter, [?] Wijkmans (brother of C.H. Wijkmans), [J.G.M. van Griethuijsen] (mayor of Oegstgeest), [illegible] Janssen.

227. Sterrewacht dagboek

Notebook with notes on the reorganization of the Observatory (1921-1923), and a diary of De Sitter's work on observatory matters from July 1922 until December 1923, followed by irregular entries and some miscellaneous notes on a few instruments, and a list of correspondence from August 1922 until January 1923.

228. Rijksbouwmeester

8 letters, 1919-1922

Correspondence regarding the expansion of the Observatory. Attached: specified offers for various new domes, including one drawing of the Heliometer tower.

Correspondents: De Sitter, Ministry for Education and Science. Partly in German

229. Address 1923

Copy of an address of all directors of Dutch astronomical institutes to the *Onderwijsraad* (Education Council) on government policy concerning astronomy (1923).

230. Union Observatory

Papers concerning the cooperation between Leiden Observatory and UOJ (1923). Includes correspondence with the South African Government concerning their official approval of the cooperation, and several drafts of the official contract between Leiden and UOJ.

231. Honorary doctorate Innes

Proceedings (both handwritten drafts and a typed copy) of the awarding of an honorary doctorate to R.T.A. Innes by Leiden University on 24 January 1923, with an accompanying letter from De Sitter.

232. Reopening 1924

Papers concerning the reopening of the Observatory on 18 September 1924, including the speech of the Minister for Education and Science, and a letter by a granddaughter of F. Kaiser (the founder of the Observatory).

233. Observatory management

File with memoranda and reports by De Sitter to the Board of Trustees and the Minister for Education and Science, concerning the Observatory budget (1924-1930), specifically concerning De Sitter's requests for increased funding for staff, computers and instruments. Includes a manuscript *Nota betreffende de formatie van het personeel der Sterrewacht* (10pp., 1924), in which De Sitter outlined the organization of the Observatory after the reorganization.

234. Staff reshuffle 1924

4 letters, 1924

Papers concerning the staff of the Observatory after the death of H.J. Zwiers in 1923. De Sitter proposed a reshuffle of several functions. Correspondents: A. van Beeck Calkoen (Ministry of Education and Science), J. de Gijsselaar (president of the Board of Trustees), C. Lely (former Minister of Public Works and Water Management), J.H. Oort.

235. Staff actions

File *Acties uitgaande van personeel* (staff actions): correspondence from staff and Unions, concerning the reorganization, working hours and salaries (1919-1926).

236. Swaak

4 letters, 1926-1927

Letters from two doctors regarding the illness of computer H. Swaak.

237. Oort 1929

3 letters, 1929

Letters concerning the appointment of J.H. Oort as lector (assistant professor) in Leiden. Correspondents: De Sitter, W. van der Woude (chairman of the Science Faculty), M.A.M. Waszink (Minister for Education and Science).

238. Smoke

5 letters, 1928-1929

Correspondence with the *Stedelijke Fabrieken van Gas en Electriciteit* (municipal power and gas company), on the smoke that hinders the observations.

239. Staff 1930

7 letters, 1930

Correspondence concerning several appointments, both in Leiden (P.Th. Oosterhoff and others) and Johannesburg (H. van Gent).

Correspondents: De Sitter, Board of Trustees.

240. Reception 1931

Report of a visit of several 'authorities', including the ambassador of South Africa, to the Observatory on 23 June 1931.

241. Observatory budget

Budgets and drafts for budgets of the Observatory (1932-1933), in relation to cutbacks on government funding.

242. Kasten

6 letters, 1932

Correspondence with several travel agencies, concerning the guided tours of the Observatory that caretaker J.H. Kasten provided.

243. 25 year professor

Papers regarding the celebration the 25th anniversary of De Sitter's professorship in 1933.

- 243.1 Speech Oort

Manuscript (13pp.) of the speech by Oort.

- 243.2 Portrait Sluijter

10 letters, 1933

Correspondence regarding the portrait of De Sitter by painter J. Sluijter, that was presented to De Sitter. Some of Oort's letters are drafts.

Correspondents: J.H. Oort, J. Sluijters, R.F.P. de Beaufort, R.S. Bakels, C. Agterberg.

244. 300 year Observatory

Papers regarding the celebration of the 300th anniversary of Leiden Observatory on 6 October 1933.

- 244.1 Correspondence

55 letters, 1933

Correspondence: mostly reactions to invitations, and congratulations by foreign astronomers.

- 244.2 Organization

19 letters, 1933

Correspondence of Oort with various astronomers concerning the organization of the celebration, and on the foundation that he wanted to establish at that occasion.

- 244.3 Speeches

Speeches of De Sitter and E. Bianchi at the occasion of the 300th anniversary of the Observatory.

- 244.4 Miscellanea

Program and guest list, and notes on the budget of the film about the life at the Observatory that was made in 1933.

Miscellanea

245. Mailing list dissertation

List of people to whom De Sitter planned to send a copy of his dissertation. Includes a letter from E.B. ter Horst, who prepared the mailing (1901).

246. Obituaries H.G. van de Sande Bakhuyzen

Drafts for obituaries of H.G. van de Sande Bakhuyzen in the *Groene Amsterdammer* and *The Observer* (1922).

247. Kapteyn

An article by De Sitter on the occasion of J.C. Kapteyn's 40th anniversary as professor (1918), an obituary of Kapteyn (1922), and notes for a lecture on Kapteyn and his work (1923).

248. Newspaper clippings

- 248.1 US lectures

Newspaper articles on De Sitter's lectures in the US (1931).

- 248.2 1933 celebration

Newspaper articles on the celebration of the 300th anniversary of the Observatory (1933).

- 248.3 Other articles

Several newspaper articles featuring De Sitter, and a cartoon of De Sitter and the expanding universe (1930). Also contains a copy of a cartoon by Johan Huizinga of De Sitter as a math student in Groningen (from a private collection).

249 Obituaries 1934

- 249.1 Obituaries 1934

Obituaries of De Sitter and letters of condolence, 1934-1935

Includes:

- obituary by J.H. Oort, in the *Monthly Notices*
- obituary by J.H. Oort, in the *Leidsch Universiteitsblad* and *De Telegraaf*
- obituary by A. van Maanen, in the *Popular Astronomy*
- obituaries by A. Pannekoek, in the *Nederlandsch Tijdschrift voor Natuurkunde* and in an unidentified newspaper.
- obituary by C.H. Hins, in the *Leidsch Dagblad*
- obituary by A.A. Nijland, in the *Utrechts Dagblad*
- Obituary in the *Nieuwe Rotterdamsche Courant*
- Report on the cremation in *Nieuwe Rotterdamsche Courant*
- letters of condolence by L. Gratton (Milan) and the Académie des Sciences, France.
- obituary by J.H. Oort in *The Observatory*
- obituary by L. Gratton in *Memorie della Società Astronomica Italiana*
- obituary by J. Huizinga in the yearbook of a student association.

- 249.2 Notes Oort

Notes by Oort for obituaries of De Sitter.

250. E. de Sitter-Suermond

Letter from E. de Sitter-Suermond, De Sitter's widow, to Oort, on her biography of De Sitter (1940). The envelope contains notes by Oort on the same subject.

251 US travel plan

List of places where De Sitter planned to stay during his US lecture tour of 1931-1932; a telegram from the staff of Leiden Observatory to Mr & Mrs. De Sitter at Mt. Wilson, wishing them a happy new year; and a welcome-back card from the staff (1932).

252. IAU 1928

Guest list of the 1928 meeting of the International Astronomical Union in Leiden (5pp).

253. Honorary doctorate Cambridge

Papers regarding the honorary doctorate awarded to De Sitter by the University of Cambridge in 1925. Includes a newspaper clipping and the seating arrangement for the official dinner.

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