

C O P Y

12 January 1967

Dr. Carl Kaysen
Institute for Advanced Study

Dear Carl:

I should be grateful to you if you would arrange for reimbursement out of my Institute travel account of my travel expenses in connection with a meeting of the American Astronomical Society at UCLA December 27-31, 1966. Part of the actual travel expense is charged to an ONR contract. Attached is a statement of expenses (\$65.58).

Sincerely,

Bengt Strömberg

C O P Y

STATEMENT

Travel expenses in connection
with AAS meeting December 27-31, 1966 at UCLA

Total airplane fare to Los Angeles, Tucson, and return to New York	\$329.23
Reimbursement out of ONR contract for travel to Tucson and return	<u>263.65</u>
Balance	\$ 65.58

OK
CF

C O P Y

12 January 1967

Mr. Minot Morgan
Institute for Advanced Study

Dear Mr. Morgan:

My expenses in connection with travel to meetings in Liege, Belgium, Copenhagen and Aarhus, Denmark, Ithaca, New York and Noordwijk, Holland during July - September, 1966, were as follows:

Plane fare, roundtrip Copenhagen-New York	\$580.00
Travel to and from airports	30.00
Travel roundtrip Leiden, Holland, Liege, Belgium, private car	40.00
Per diem, Copenhagen, 4 days	64.00
Travel, roundtrip Copenhagen-Aarhus	17.00
Per diem, Aarhus, 1 day	16.00
Per diem, Ithaca, New York, 4 days	64.00
Per diem, Noordwijk, 8 days	<u>128.00</u>
Total	\$939.00
Travel advance	<u>800.00</u>
Balance	\$139.00

I should be grateful to you if you would arrange for my reimbursement out of my Institute travel account in the amount of \$139.00.

I would like to add that I crossed the Atlantic twice during April-September, 1966. However, only the expense for one of these trips is charged to my Institute travel account.

Sincerely,

Bengt Strömberg

OK
OK

Strömberg

26 July 1966

Memorandum to Mr. Morgan:

This will authorize you to charge Professor Strömberg's travel fund and pay him the sum of \$800, as an advance toward the expenses of his travel for professional purposes in July and August of this year.

Carl Kaysen

Copy to Professor Strömberg

THE INSTITUTE FOR ADVANCED STUDY

PRINCETON, NEW JERSEY 08540

SCHOOL OF MATHEMATICS

25 July 1966

Dr. Carl Kaysen, Director
Institute for Advanced Study
Princeton, New Jersey

Dear Dr. Kaysen:

This summer I have attended the Fourteenth International Colloquium on Astrophysics in Liège, Belgium, serving as President of the meeting. I plan to attend the meeting of the American Astronomical Society that is going to be held at Cornell University July 25-28 in order to take over the presidency of the Society at the end of the meeting. I shall also attend the International Astronomical Union Symposium that is to be held in Holland in August.

I should be grateful to you for arranging payment of a travel advance in the amount of \$800 out of my Institute travel account toward the expenses in connection with this travel.

I am looking forward to seeing you again at the Institute in September.

Sincerely yours,

Bengt Strömberg

Bengt Strömberg

30 June 1966

Memorandum to Mr. Morgan:

This will authorize you to charge Professor Strömgren's travel fund and pay him the sum of \$7., which is the difference between the advance of \$550 he received, and his total expenses of \$557 for his trip to Denmark in September, 1965.

Robert Oppenheimer

Copy to Professor Strömgren

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY 08540

SCHOOL OF MATHEMATICS

June 27, 1966

Mr. Minot Morgan
The Institute for Advanced Study

Dear Mr. Morgan

My travel expenses in connection with my trip to
Denmark in September, 1965, were as follows:

Airplane fare (economy, 14/21 days) New York - Copenhagen (roundtrip)	\$380.00
Travel from Princeton to Kennedy airport, and return travel from airport to Princeton	19.00
Two trips Copenhagen - Aarhus and return for visits to Aarhus University and Ole Rømer Observatory	42.00
Two trips to Brouhede Observatory (by rented car)	20.00
Per diem, 12 days in Copenhagen (\$8 per day, no lodging expenses)	96.00
	<hr/>
Total expenses	\$557.00
Travel advance received	\$550.00
	<hr/>
Balance	\$ 7.00

I should be grateful to you if you would arrange for
payment out of my travel account of the balance in the amount
of \$7.00.

Sincerely,

Bengt Strömberg

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

13 August 1965

Dear Robert:

I have just returned from the NASA Goddard Space Flight Center in Greenbelt, Maryland, where I attended the Symposium on Atomic Interactions and Space Physics and chaired the Astrophysics Section. There were some interesting talks, including one by A. Burgess who discussed the continuation of the work on dielectronic recombination which he carried out when he was a member here.

I should be grateful to you if you would make arrangements for reimbursement out of my Institute travel account of my travel expenses which amounted to \$58.38.

Sincerely,

Bengt

From: Bengt Strömberg

To: Dr. Robert Oppenheimer

COPY

13 August 1965

Mr. Minot C. Morgan
The Institute for Advanced Study

Dear Mr. Morgan:

My travel expenses in connection with a visit to the NASA Goddard Space Flight Center in Greenbelt, Maryland, to attend a Symposium on Atomic Interactions and Space Physics, August 10-11, 1965, were as follows:

Trenton, N.J., to Washington, D.C., and return, by rail	\$16.18
Taxis in Washington, D.C.	1.70
Taxi to Greenbelt, Maryland	8.50
Per diem, two days	<u>32.00</u>
	\$58.38

I should be grateful to you if you would arrange for reimbursement out of my Institute travel account.

Sincerely,

Bengt Strömberg

Re old original
8/13

13 August 1965

Mr. Minot C. Morgan
The Institute for Advanced Study

Dear Mr. Morgan:

My travel expenses in connection with a visit to the NASA Goddard Space Flight Center in Greenbelt, Maryland, to attend a Symposium on Atomic Interactions and Space Physics, August 10-11, 1965, were as follows:

Trenton, N.J., to Washington, D.C., and return, by rail	\$16.18
Taxis in Washington, D.C.	1.70
Taxi to Greenbelt, Maryland	8.50
Per diem, two days	<u>32.00</u>
	\$58.38

I should be grateful to you if you would arrange for reimbursement out of my Institute travel account.

Sincerely,

Bengt Strömberg

*For Strömgren
Travel*

1 July 1965

Memorandum to Mr. Morgan:

This will authorize you to charge Professor Strömgren's travel fund and pay him \$550, as an advance for his travel to Denmark this summer, to lecture to the Society for the Advancement of Science, and visit the Brorfelde Observatory.

Robert Oppenheimer

Copy to Professor Strömgren

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

July 1, 1965

Dear Robert:

My plans for the trip to Denmark this summer are now definite. I have been informed that the day of the lecture to the Society for the Advancement of Science is September 29. Before that I shall work for a few weeks at the Brorfelde Observatory. I expect to be back in Princeton on September 30.

I have recently heard from Anders Reiz that recent very extensive series of observations with the meridian circle at Brorfelde Observatory confirm the preliminary results and show that the accuracy of the positions obtained is considerably better than that of the best meridian circle positions determined elsewhere. I am planning to discuss the coordination of the Copenhagen work on positions with my photometric work carried out at Kitt Peak National Observatory.

I should be grateful to you if you would arrange for payment out of my Institute travel fund of a travel advance in the amount of \$550 toward the expenses in connection with my travel to Denmark.

Sincerely,

Bengt

Bengt Strömberg

Dr. Robert Oppenheimer
The Institute for Advanced Study

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

6 October 1964

Memorandum to Mr. Morgan:

My expenses in connection with travel to meetings in Stockholm, Hamburg, Athens and Bruxelles and visits to Brorfelde Observatory, Copenhagen Observatory, the H. C. Ørsted Institute and Aarhus Observatory during the period 20 June 1964 - 29 September 1964 were as follows:

Transportation, Princeton - New York and return	\$	30.00	
New York - Copenhagen		425.00	
Copenhagen - Athens - Bruxelles - New York		464.80	
Excess baggage, Copenhagen - Athens		30.32	
Air freight baggage, Bruxelles - New York		57.00	
Copenhagen - Aarhus and return		15.00	
Copenhagen - Stockholm and return		35.00	
Copenhagen - Hamburg and return		28.00	
Stockholm, 8 days, per diem		128.00	
Hamburg, 11 days, per diem		176.00	
Athens and Bruxelles, expenses paid		--	
Visits to Brorfelde Observatory, Copenhagen			
Observatory, H. C. Ørsted Institute and			
Aarhus Observatory, 16 days, per diem,			
\$256, and transportation by rented			
automobile, 560 miles and 13 days, \$108.		364.00	\$1,753.17
Received partial reimbursement, Summer Course, Athens		268.00	
Received reimbursement, Solvay Conference, Bruxelles		110.00	
		Net expenses	1,375.17
		Travel advance received	1,000.00
		Balance	\$ 375.17

I should be grateful to you if you would arrange for payment of the balance of the expenses, \$375.17, out of my Institute travel account sometime after July 1, 1965.

Sincerely,

Bengt Strömberg

Bengt Strömberg

Mr. M. C. Morgan, Jr.
The Institute for Advanced Study

OW RC



Swedish American Line

(AKTIEBOLAGET SVENSKA AMERIKA LINIEN)

**EASTBOUND
PASSAGE CONTRACT**

THIS CONTRACT IS NOT TRANSFERABLE AND IS ISSUED SUBJECT TO THE TERMS AND CONDITIONS CONTAINED ON THIS PAGE AND ON THE REVERSE THEREOF, ALL OF WHICH ARE MADE PART OF THIS CONTRACT

No. E 42764

SHIP MS KUNGSHOLM SAILING DATE 20. June. 1964 SAILING HOUR 11.30 am PIER 97
(Local City Time)
SAILING FROM New York N.Y. PORT OF LANDING Copenhagen BOOKED THROUGH TO

Unless otherwise noted, New York sailings are from Pier 97, North River, Foot of West 57th Street

FIRST- CLASS		Unless otherwise noted, New York sailings are from Pier 97, North River, Foot or West 57th Street				
DECK AND ROOM	BED OR BERTH	NAMES OF PASSENGERS	AGE	SEX	NATIONALITY	OCEAN FARE
M-14	all	STROMGREN, Prof. Bengt	ad	M	USC.	\$ 425.- ✓
"	"	" , Mrs. Signe	"	F	"	\$ 425.-
S-14						\$
						\$
						\$
						\$
						\$
						\$

ROUND TRIP PARTICULARS		No. FULL FARE(S)	HALF FARE(S)	INFANT(S)	SERVANT(S)	TOTAL OCEAN FARES	
WESTBOUND TICKET No. <u></u>		<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>\$ 850.-</u>	

SHIP SWEDISH AMERICAN LINE
SAILING DATE AGENT none TAXES \$

PASSENGER'S ADDRESS IN AMERICA 45. Velben Circle, ISSUED BY SAL Cophgn.

Princeton N.J. SIGNATURE H. E. Strömberg TOTAL RECEIVED \$ 850.-

PASSENGER'S ADDRESS IN EUROPE Observatoriet, PLACE OF ISSUE Cophgn. DATE 12. May. 64

Øster Voldgade, Issued in exchange for No. DATE

Copenhagen Ø. PLACE EXCHANGE VALUE

TABLE No.

SERVICE

PASSENGER'S COPY

By acceptance of this contract ticket, whether or not signed by him or on his behalf, or of passage on the steamer, each passenger agrees that the terms and conditions on the face and back hereof, which are incorporated herein as part hereof, shall govern the relations between him and the Carrier and be binding in every possible contingency.

1. Definition of terms used herein. "Carrier" means the Swedish American Line. "Steamer" includes the steamer or motor vessel named herein or any vessel sub-

4. If the vessel carries a surgeon, physician, barber, hairdresser, manicurist or shop attendants, that is done solely for the convenience of passengers and any such

SAS Issued by
SCANDINAVIAN AIRLINES SYSTEM
DENMARK NORWAY SWEDEN

For Conditions of Contract
 see Passenger Ticket and Baggage Check

EXCESS
 BAGGAGE TICKET
 PASSENGER COUPON

1176

0223820

Declared value _____ Cy.

Valuation charge
 on above declared value _____ Cy.

Previously pd. val. chge. _____ Cy.

Balance of val. charge _____ Cy.

Total weight 33 Kgs.

Free allowance
 and previously
 pd. exc. wt. 40 Kgs.

Excess weight 13 Kgs.

Excess wt. chge. à 16.05 per kilo _____ Cy.

Excess wt. chge. à _____ per kilo _____ Cy.

Total charges _____ Cy.

Tax _____ Cy.

Total payment 208.65 Cy.

Passenger ticket
 Form & No. 1113/347221

Form of Payment
PEPS CHECK

Place and Date of issue
 Not good unless officially validated

SAS
 17-4 9029
 -8 SEP. 1964
 COPENHAGEN
 DENMARK
 Agent

From

COPENHAGEN

Carrier

SK 601

To

ZURICH

SK 370

To

HT/HEMS

BORDING/DENMARK

SAS 1105:6

Director's Office: Faculty Files: Box 31: Strömngren, Bengt, Travel Fund
From the Shelby White and Leon Levy Archives Center, Institute for Advanced Study, Princeton, NJ, USA

1508148

At Departure

Passengers are requested to report for coach departure at Town Terminal at times stated below.

Passengers using their own means of transportation to the airport must report at the counter there at times stated below.

Passengers arriving later than stated below cannot claim transportation.

On Arrival

Passengers are kindly asked to check their onward or return reservation as soon as possible upon arrival. At the same time please give your temporary address for any possible messages from SAS.

Ved avreisen

Passasjerer anmodes om å innfinne seg ved bussens avgangssted i rett tid (se nedenfor).

Passasjerer, som benytter egen befording til flyplassen, må melde seg i flyplassens passasjerekspedisjon til de tider som er angitt nedenfor.

Passasjerer, som innfinner seg senere, har ikke krav på befording.

Ved ankomsten

Passasjerer anmodes om snarest å kontrollere eventuell plassbestilling for videre- eller retur-reise. Oppgi samtidig en adresse hvor SAS kan gi eventuelle meddelelser.

Check-in at town terminal
Frammøte ved bussens avgangssted

Address	Time
København SAS Hammerichsgade	850
ATHEN 4.B STADIUM STREET	0835

Check-in at airport
Frammøte på flyplassen

Airport	Time
København	0910
Athen	0905

Note: Passengers holding confirmed reservations between continents are required to reconfirm such reservations at least 72 hours prior to departure. Failure to comply with this rule will entitle the carrier to make all remaining reservations available for resale.

Obs! Passasjerer som har bekreftede reservasjoner mellom kontinentene anmodes om å kontrollere disse senest 72 timer før avreisen. Unntatelse av å følge denne regel gir flyselskapet rett til å annullere reserverte plasser.

Issued by SAS SCANDINAVIAN AIRLINES SYSTEM DENMARK NORWAY SWEDEN		Subject to Conditions of Contract (Page 2)	PASSENGER TICKET AND BAGGAGE CHECK PASSENGER COUPON		1173	3473021				
FOR ISSUING OFFICE USE ONLY			Complete routing this ticket and → Conjunction ticket(s)		Date and Place of issue of this ticket					
From	Carrier	Fare calculation	Origin	Form	Serial(s)	17-4 8023				
To			Destination	Form	Serial(s)	-4 SEP 64				
			Issued in exchange for	Date and Place of original issue		COPENHAGEN DENMARK				
			Form	Serial(s)	Accounting use only		Agent			
Endorsements			NOT GOOD FOR PASSAGE							
Baggage			Valid until							
Free allow.	Checked Pcs.	Wt.	Unc'kd Wt.	From	Fare Class/Basis	Via carrier	Flight number	Date	Time	Res. status
20	4	45	8	COPENHAGEN	T	AT	601	SEP 16	440	OK
20	1			ZÜRICH	T	SR	370	SEP 18	1455	OK
20	1			ATHEN	T	SR	325	SEP 20	1005	OK
20	1			ZÜRICH	T	SR	325	SEP 20	1005	OK
Fare			Name of passenger		Ticket design.					
Equiv. Am't			440		9/R.					
Paid			MR. STRÖMNGREN		Not transferable					
Tax					64 109					
Total										
Form of Payment										

*If the passenger's journey involves an ultimate destination or stop in a country other than the country of departure, the Warsaw Convention may be applicable and the Convention governs and in most cases limits the liability of carriers for death or personal injury and in respect of loss of or damage to baggage.

Director's Office: Faculty Files: Box 31: Strömgren, Bengt, Travel Fund
From the Shelby White and Leon Levy Archives Center, Institute for Advanced Study, Princeton, NJ, USA

Note: Passengers holding confirmed reservations between continents are requested to reconfirm such reservations at least 72 hours prior to departure. Failure to reconfirm may result in the cancellation of the reservation and the carrier assumes no responsibility for the consequences.

Passasjerer som har bekrefte reservations-
mentene anmodes om å kontrollere seg senest 72 timer før avreisen.
Ikke å følge denne regel gir flyselskapet rett til å annullere reserverte plasser.

Passengers are requested to report for coach departure at Town Terminal at times stated below.

Passengers using their own means of transportation to the airport must report at the counter there at times stated below.

Passengers arriving later than stated below cannot claim transportation.

On Arrival

Passengers are kindly asked to check their onward or return reservation as soon as possible upon arrival. At the same time please give your temporary address for any possible messages from SAS.

Ved avreisen

Passasjerer anmodes om å innfinne seg ved bussens avgangssted i rett tid (se nedenfor).

Passasjerer, som benytter egen befording til flyplassen, må melde seg i flyplassens passasjerekspedisjon til de tider som er angitt nedenfor.

Passasjerer, som innfinner seg senere, har ikke krav på befording.

Ved ankomsten

Passasjerer anmodes om snarest å kontrollere eventuell plassbestilling for videre- eller retur-reise. Oppgi samtidig en adresse hvor SAS kan gi eventuelle meddelelser.

Check-in at town terminal
Frammøte ved bussens avgangssted

Bruxelles/Melsbroek:

Sabena Air Terminus
37, Rue Cardinal Mercier

Address

Time

CITY

Check-in at airport
Frammøte på flyplassen

Airport

Time

Kindly check your onward
or return reservations and
assembly times locally.

SAS <small>ISSUED BY</small> SCANDINAVIAN AIRLINES SYSTEM <small>DENMARK NORWAY SWEDEN</small>		<small>SUBJECT TO CONDITIONS OF CONTRACT (PAGE 2)</small>		PASSENGER TICKET AND BAGGAGE CHECK PASSENGER COUPON		1173	3473022						
FOR ISSUING OFFICE USE ONLY				Complete routing this ticket and		Conjunction ticket(s)		Date and Place of issue of this ticket					
From	To	Carrier	Fare calculation	Origin	Form	Serial(s)	Form						
OSL	NYC			Destination	Form	Serial(s)	Date and Place of original issue						
				Issued in exchange for	Form	Serial(s)	Accounting use only						
				Endorsements									
				Baggage		Valid until	NOT GOOD FOR PASSAGE						
				Free allow	Checked Pcs. Wt.	Unck'd wt.	From	Fare Class/Basis	Via carrier	Flight number	Date	Time	Res. status
				20	435	10	WIRATH	T	SAB	664	20	1305	OK
				20	435	10	BRUXELLES	T	BA	448	23/0	1305	OK
				20	439	01	LONDON	Y	BA	705	29	1015	OK
				Name of passenger			To	Ticket design.		Not transferable			
				Fare			If the passenger's journey involves an ultimate destination or stop in a country other than the country of departure, the Warsaw Convention may be applicable and the Convention governs and in most cases limits the liability of carriers for death or personal injury and in respect of loss of or damage to baggage.						

C O P Y

Fac - Strömberg
 Travel

6 October 1964

Memorandum to Mr. Morgan:

My expenses in connection with travel to meetings in Stockholm, Hamburg, Athens and Bruxelles and visits to Brorfelde Observatory, Copenhagen Observatory, the H. C. Ørsted Institute and Aarhus Observatory during the period 20 June 1964 - 29 September 1964 were as follows:

Transportation, Princeton - New York and return	\$	30.00	
New York - Copenhagen		425.00	
Copenhagen - Athens - Bruxelles - New York		464.80	
Excess baggage, Copenhagen - Athens		30.32	
Air freight baggage, Bruxelles - New York		57.00	
Copenhagen - Aarhus and return		15.00	
Copenhagen - Stockholm and return		35.00	
Copenhagen - Hamburg and return		28.00	
Stockholm, 8 days, per diem		128.00	
Hamburg, 11 days, per diem		176.00	
Athens and Bruxelles, expenses paid		--	
Visits to Brorfelde Observatory, Copenhagen			
Observatory, H. C. Ørsted Institute and			
Aarhus Observatory, 16 days, per diem,			
\$256, and transportation by rented			
automobile, 560 miles and 13 days, \$108.		364.00	\$1,753.17
Received partial reimbursement, Summer Course, Athens		263.00	
Received reimbursement, Solvay Conference, Bruxelles		110.00	
		Net expenses	1,375.17
		Travel advance received	1,000.00
		Balance	\$ 375.17

I should be grateful to you if you would arrange for payment of the balance of the expenses, \$375.17, out of my Institute travel account sometime after July 1, 1965.

info TK on
 this.

Sincerely,

Bengt Strömberg

Mr. M. C. Morgan, Jr.
 The Institute for Advanced Study

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

June 15, 1964

Dear Robert:

My plans for the summer include a stay in Denmark and participation in meetings that are to be held in Stockholm, Hamburg, Athens and, of course, Bruxelles during August and September. During my stay in Denmark I expect to collaborate with Anders Reiz on stellar-evolution calculations in preparation for the work that we hope to accomplish during his stay at the Institute, October 1964 - April 1965. I shall be leaving for Copenhagen on June 20, 1964, and expect to be back in Princeton on September 30, 1964.

I should be grateful to you if you would make arrangements for a travel advance in the amount of \$1,000 to be paid out of my Institute travel account after July 1, 1964.

Sincerely,

Bengt

To: Dr. Robert Oppenheimer

From: Bengt Strömberg

COPY, marked OK, RO, to Mr. Morgan

26 June 1963

Mr. Minot Morgan
Institute for Advanced Study

Dear Mr. Morgan:

My expenses for two trips to Europe July 8 - September 28, 1962,
and October 9 - October 15, 1962, were as follows:

Transportation Princeton-Idlewild Airport and return	\$ 24.00
Plane ticket New York-Copenhagen and return (voucher enclosed)	561.60
Per diem, 22 days at Copenhagen University Observatory and Aarhus University Observatory	264.00
Transportation by rented car to Bror felde Observatory, 8 trips, (640 miles)	120.00
Plane ticket Copenhagen-London and return (night coach) to attend conference (August 7 - 11 at Royal Greenwich Observatory (Herstmonceux Castle)	70.00
Transportation London-Herstmonceux Castle and return (railway ticket)	12.00
Per diem, 2 days in London	24.00
Taxis in London	5.00
Expenses during meeting (lodging free), 5 days	30.00
Transportation Princeton-Idlewild Airport and return	24.00
Plane ticket New York-London and return (voucher enclosed)	350.00
Per diem, 6 days in London	72.00
Taxis in London	13.00
Expenses, one trip to Cambridge and one trip to Oxford	<u>17.00</u>
Total expenses	\$1,586.60

I have received a travel advance out of my travel account in the amount
of \$1400.00. This leaves a balance of \$186.60. I should be grateful to you if
you would arrange for my reimbursement in this amount out of my travel account,
on or after July 1, 1963, when the balance in the account will be \$1000.06.

Sincerely,

Bengt Strömberg

OK'd for RO
by VH 6/27/63

Strömberg Trav

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

26 June 1963

Dr. Robert Oppenheimer
Institute for Advanced Study

Dear Robert:

I plan to leave Princeton for Copenhagen on July 4 in order to participate in the meeting at the Institute for Teoretisk Fysik July 8 - 12 and give a talk on July 12. After the meeting I will spend a few days at the Observatory to test the spectrograph-photometer that has been put together there for use at the Kitt Peak National Observatory. I expect to be back in Princeton on July 19.

I should be grateful to you if you would arrange to have a travel advance in the amount of \$800 paid to me out of my Institute travel account on or about July 1.

Sincerely,

Bengt

Bengt Strömberg

Approved for Dr. Oppenheimer, 27 June 1963.

Verna Hobson

cc: Mr. Morgan
Professor Strömberg

July 22, 1963

Mr. Minot C. Morgan
Institute for Advanced Study

Dear Mr. Morgan:

My expenses in connection with the trip, July 4-19, 1963, to Copenhagen to attend the meeting at the Institut for Teoretisk Fysik were as follows:

Travel to Idlewild Airport and return	\$ 20.00
Plane fare New York - Copenhagen and return (voucher attached)	592.80
Per diem (15 days)	180.00
Taxis in Copenhagen	22.00
Car Rental, two trips to Brorfelde Observatory	51.00
Expenses in connection with visit to Aarhus Observatory	<u>19.00</u>
Total expenses	\$ 884.80
Received from Institut for Teoretisk Fysik toward expenses in Copenhagen 500 D. Cr.	<u>72.00</u>
Net expenses	<u>\$ 812.80</u>
Travel advance received	<u>800.00</u>
Balance	\$ 12.80

I should be grateful to you for arranging for my reimbursement out of my travel account in the amount of \$ 12.80.

Sincerely,

Bengt Strömberg

February 8, 1963

Mr. Minot C. Morgan
The Institute for Advanced Study

Dear Mr. Morgan:

I should be grateful to you if you would arrange for reimbursement out of my travel account of expenses in connection with a trip to Philadelphia and Paoli, Pa., to visit the Flower and Cook Observatory on December 28th 1962, and to give a paper at the meeting of the Astronomy section of the AAAS in Philadelphia on December 29, 1962. My expenses were:

Transportation (railway fare)	\$ 3.50
Per diem (one day)	<u>16.00</u>
TOTAL	\$19.50

Sincerely,

Bengt Strömberg

19 January 1962

Memorandum to Mr. Morgan:

This will confirm Dr. Oppenheimer's approval of Professor Strömberg's request for an advance of \$50. from his travel fund for his expenses in attending a meeting of the Institute for Space Studies in New York on January 23-26.

Verna Hobson

Copy to Professor Strömberg

THE INSTITUTE FOR ADVANCED STUDY

PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

16 January 1962

Dear Robert:

I should be grateful to you if you would arrange for a travel advance in the amount of \$50 out of my travel account toward expenses in connection with my participation in a meeting of the Institute for Space Studies and at Columbia University January 23-26, 1962.

Sincerely,

Bengt

Bengt Strömberg

Dr. Robert Oppenheimer

OK
RD

*Strömberg
Travel*

9 August 1961

Memorandum to Mr. Morgan:

In Dr. Oppenheimer's absence, I am authorizing the payment to Professor Strömberg of \$500 from his travel fund, as an advance toward his expenses in attending the General Assembly of the International Astronomical Union in Berkeley, California, this month.

Also authorized herewith is the payment to Professor Strömberg, from his travel fund, of the balance of \$3.60 for his travel expenses to Europe in the summer of 1960 which was not covered by the \$1,000 he received as an advance.

Verna Hobson

Copy to Professor Strömberg

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

9 August 1961

Dr. Robert Oppenheimer
Institute for Advanced Study

Dear Robert:

I plan to attend the General Assembly of the International Astronomical Union 13 August - 25 August 1961 in Berkeley, California. In this connection I should be grateful to you if you would arrange for payment of a travel advance in the amount of \$500 out of my travel account.

Sincerely,

Bengt

Bengt Strömgren

C O P Y

9 August 1961

Dr. Robert Oppenheimer
Institute for Advanced Study

Dear Robert:

I plan to attend the General Assembly of the
International Astronomical Union 13 August - 25 August
1961 in Berkeley, California. In this connection I should
be grateful to you if you would arrange for payment of a
travel advance in the amount of \$500 out of my travel
account.

Sincerely,

Bengt Strömberg

9 August 1961

Mr. Minot Morgan
Institute for Advanced Study

Dear Mr. Morgan:

My expenses for travel to Leiden Observatory, Kapteyn
Astronomical Laboratory, Groningen, and Copenhagen Observatory
16 June 1960 to 27 August 1960 were as follows:

Transportation Princeton - New York Idlewild Airport and return	\$18.00
Plane ticket New York - Amsterdam and return	507.60
Amsterdam-Leiden-Groningen-Copenhagen- Amsterdam by private automobile, 1500 miles at \$.10 per mile	150.00
Private automobile by ferry boat	15.00
Six trips to Bror feld de Observatory of Copenhagen University, by private auto- mobile, 480 miles at \$.10 per mile	48.00
Per diem, \$12. per day, 22 days (Leiden Observatory 6 days, Kapteyn Astronomical Laboratory 2 days, Copenhagen University Observatories 11 days, en route 3 days)	264.00
	Total \$1003.60

I have received a travel advance out of my travel allowance
in the amount of \$1000.00. This leaves a balance of \$3.60. I
should be grateful to you if you would arrange for my reimbursement
in this amount out of my travel account.

Sincerely,

Bengt Strömberg

5 July 1961

Dr. N. U. Mayall, Director
Kitt Peak National Observatory
950 North Cherry Avenue
Tucson, Arizona

Dear Nick:

Since we discussed the question regarding the publication of the results of the photoelectric four-color photometry during my last stay in Tucson I have, as you suggested, asked Dr. Bowen about his wishes in the matter.

I enclose a copy of the letter I sent to Dr. Bowen, and also a photostat copy of his reply. As you see there is no objection to having the observations obtained at Palomar and Kitt Peak published in one paper. Also there is no objection to KPNO reprints.

The observations I got at Kitt Peak last May are completely reduced, and the results put on cards for the stars in question. I was happy that this could be done so quickly, thanks to the nice arrangements that you made for Bob Cameron, and the use of the KPNO computer.

The accuracy of the 36-inch Kitt Peak observations (May 1961) is very satisfactory. In particular, the observations on the three nights devoted to the observations on the standard-star network had very small probable errors, namely $\pm 0^m.0021$, $\pm 0^m.0034$, and $\pm 0^m.0032$ (p. e. 1 observation) for $m(\lambda) - m(y)$, c and m , respectively. This compares with the following probable errors for my 1960 observations with the 20-inch at Palomar, $\pm 0^m.005$, $\pm 0^m.008$, $\pm 0^m.007$. The accuracy of the average Kitt Peak night during the May period is not quite so good as that of the 3 standard-star nights, but still considerably better than the average precision obtained during my Palomar 20-inch observations.

The material is of course too small for any general conclusions to be drawn. However it does show, I think, that the best photometric sky at Kitt Peak is extremely good.

About one-third of the observations that Charles Perry obtained at Kitt Peak last winter is still not reduced. I hope to get the computer sheets during July, however, and after that I should have only two or three weeks of final reduction work left.

Sincerely,

Bengt Strömberg

MOUNT WILSON AND PALOMAR OBSERVATORIES

CARNEGIE INSTITUTION OF WASHINGTON
CALIFORNIA INSTITUTE OF TECHNOLOGY

813 SANTA BARBARA STREET
PASADENA, CALIFORNIA

July 3, 1961

Dr. Bengt Strömberg
Institute for Advanced Study
Princeton, New Jersey

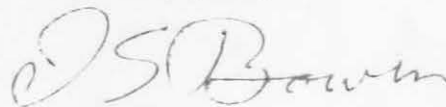
Dear Dr. Strömberg:

Thank you for your letter of June 30 with the enclosed material for the Annual Report. This is just what I needed.

In general the policy of the Observatories is to assume no responsibility for the publication of results obtained by its guest investigators. In line with this policy we do not have the slightest objection to the publication of material obtained at Kitt Peak and at Palomar in the same article. Also, since the material is to be published under the name of your own institution rather than the Mount Wilson and Palomar Observatories we in general do not obtain reprints for our files.

With best regards,

Sincerely yours,



I. S. Bowen

IB:WB

30 June 1961

Dr. I. S. Bowen, Director
Mount Wilson and Palomar Observatories
813 Santa Barbara Street
Pasadena, California

Dear Dr. Bowen:

Enclosed I am sending you a report on the work I carried out at Mount Wilson and Palomar Observatory as a guest investigator during the year 1960-61.

The report is a good deal longer than what you requested since I would like to inform you somewhat in detail about the program and the results obtained so far. I hope that you will not find it very cumbersome to extract from this report the lines for the year report.

I would like to bring up a question regarding the publication of the results of the photoelectric four-color photometry. As you see from the enclosed report the program of observations of A2-G0 stars brighter than 6.5^m and north of -10° which was finished last August and September at Mount Palomar Observatory between 17^h and 3^h right ascension has now completed for the right ascensions 3^h to 17^h through observations at Kitt Peak National Observatory (Mr. Charles Perry observed there in January and February 1961, and I myself in May, 1961).

From the point of view of the discussion of the photometry it would be most advantageous to publish the resulting catalogue in one paper. However, you might prefer it if the Mount Palomar observations and the Kitt Peak observations were published in two separate papers.

I discussed this question with Dr. Mayall last month. He indicated that it would be quite satisfactory to him if the Palomar and Kitt Peak observations were published in one paper and suggested that I discuss the question with you.

If the observations were to be published in one paper, then Dr. Mayall would like to have reprints made for Kitt Peak National Observatory. He suggested that reprints might also be made for Mount Wilson and Palomar Observatories, however my impression is that the Mount Wilson and Palomar Observatories series does not generally include the works of guest investigators.

- 2 -

I should be grateful to you if you would let me know what your wishes are in connection with this publication question.

I would like to thank you and your colleagues on the Observatory Council once more for the opportunity to work at Mount Wilson and Palomar Observatories as a guest investigator, for the very generous help and co-operation I have had, and for the kind hospitality both at Mount Palomar and in Pasadena.

With all best wishes,

Sincerely,

Bengt Strömgren

1. During the period July 25 - September 24, 1960, the 20-inch reflector was available for observations on my photoelectric program for 45 nights. Out of these, 38 nights were partly or completely clear (more than 70 per cent of the nights were completely clear).

The program included all A2 - G0 stars (Harvard classification) brighter than 6.^m5 visual and north of declination -10°. These were to be observed photoelectrically in four bands of half-widths 200-300Å at the following wave-lengths:

y	3450Å
b	4100
v	4700
u	5500

The observations July-September, 1960, covered the right ascensions 17^h to 4^h. A network of 60 standard stars was set up, and uvby-photometry of these stars was carried out on 10 nights. The program stars were then observed relative to the standard stars in zones of 10° width in declination. The program was practically completed between 17^h and 3^h right ascension, with at least 2 observations on separate nights for each star. A number of Pleiades and Hyades stars fainter than the 6.^m5 limit were observed in addition to the program stars. Altogether approximately 2100 observations of about 600 stars were obtained (about 26,000 deflections were recorded),

In the photoelectric observing I was assisted by Mr. Charles Perry and Mr. Robert Cameron (on 18 nights the observers were Strömberg - Perry, on 10 nights Strömberg - Cameron, on 10 nights Perry).

The reduction of the observations has been completed. The color index $m(b) - m(y)$, and the color index differences

$$c = [m(u) - m(v)] - [m(v) - m(b)], \text{ Balmer index}$$

$$m = [m(v) - m(b)] - [m(b) - m(y)], \text{ Metal-content index}$$

have been derived. The photometric accuracy is satisfactory, the probable errors of 1 observation being as follows:

$$\begin{array}{rcl} m(b) - m(y) & \pm & 0.005 \\ c & \pm & 0.008 \\ m & \pm & 0.007 \end{array}$$

It was expected that the photoelectric photometry in question would yield 1. an index of effective temperature which is relatively insensitive to differences in chemical composition, 2. the absolute magnitude from $m(b) - m(y)$ and c , 3. for the late F and G stars an index that is well correlated with the metal-hydrogen ratio.

A preliminary discussion has fully confirmed these expectations. The $[m(b) - m(y)] - c$ diagram has been calibrated in terms of absolute magnitude with the help of trigonometric and cluster parallaxes. It appears that absolute magnitudes can be determined with an accuracy of about $\pm 0.2^m$ (p.e.). It should be emphasized that this method is only valid for practically unreddened stars, contrary to what is the case for the $H\beta - c$ method. However, the applications in the present program are for stars within 100 parsec, the limitation in question is of no consequence.

The discussion of the metal-content index m has led to the following results. For stars in the $(B-V) -$ range $0.35 - 0.43$ and within 2^m of the age-zero line the value of m is practically independent of color index and absolute magnitude. The scatter of m is very small in this range (r.m.s. variation considerably less than 0.01) indicating that the influence of any parameters beyond the basic parameters mass and age upon m is very small here. For the $(B-V) -$ range $0.44 - 0.65$ there is a considerable range of variation of m . The deviations from the $[m(b) - m(y)] - m$ relation for the Hyades is systematic, in the sense that the m -indices indicate a lower metal-line absorption than for the Hyades stars. The variations cannot be explained in terms of an absolute magnitude effect but point to variations in a chemical-composition parameter. This conclusion is confirmed by comparison of the m -index with metal-hydrogen ratios determined by Greenstein, Helfer, Wallenstein, Carlson, and others. The range of variation in m for the program stars in the $(B-V)$ -range $0.44 - 0.64$ corresponds to a variation in the metal-hydrogen ratio by approximately a factor 3. The absence of noticeable variation in m for the $(B-V) -$ range $0.35 - 0.43$ can be attributed to the smaller age range and greater uniformity in chemical composition of these stars.

For the $(B-V)$ -range $0.05 - 0.34$ the observations indicate a considerable variation in m for given effective temperature and absolute magnitude. This points to the importance of a third parameter (and possibly further parameters), in the case of these stars, however a parameter other than the metal-hydrogen ratio, which would be less effective here than for the $(B-V)$ -range $0.35 - 0.43$ where its influence was found to be very small. The value of $B-V$ for which these variations set in suggests that the effect may be connected with the influence of rotation and magnetic fields. Metallic-line stars have generally relatively high m -values.

The observational program of photoelectric four-color observations of A2 - G0 stars brighter than 6.5^m and north of -10° has been continued for the right ascensions 3^h to 17^h at Kitt Peak National Observatory in January, February and May, 1961, and has now been completed.

It is intended to use the data for A2 - F4 stars for a study of space motions of the stars grouped according to age on the basis of the photoelectric photometry. For the F5-G0 stars it is intended to study the correlation between space motion, age, and chemical composition.

2. During August and September 1960, I could use the 48-inch Schmidt telescope on 8 nights for a survey in high galactic latitudes of population II main-sequence F and G stars with high ultraviolet excess. Altogether 39 program plates (10 x 10 inches) were obtained. Each plate has one ultraviolet-filter exposure (28 minutes exposure time) and one yellow-filter exposure (3 minutes exposure time). The image strengths are about matched for main-sequence F5 stars of population I. The limiting magnitude is 17.3^m .

The evaluation of the plates will be carried out with the help of an automatic scanner that will select about 3 per cent of the stars for microphotometric measure. On the basis of the latter measures about 1 percent of the stars brighter than 15.5^m visual - with the highest ultraviolet-yellow intensity ratios - will be selected for photoelectric UVV photometry.

During May, 1961, an additional 18 plates were obtained on this program during 4 nights of observing with the 48-inch Schmidt telescope.

Bengt Strömberg

30 June 1961

C O P Y

Strömberg Trav

11 September 1961

Mr. Minot C. Morgan, Jr.
Institute for Advanced Study

Dear Mr. Morgan:

The expenses in connection with my participation in the General Assembly of the International Astronomical Union 1961 August 15-24 were as follows:

Transportation from Princeton to Newark Airport	\$6.00
Roundtrip airplane New York - San Francisco (voucher attached)	321.31
Transportation from San Francisco Airport to Berkeley and back to Airport	8.00
Taxis in Berkeley	6.00
Transportation from Idlewild International Airport to Princeton	8.00
Per diem, \$12 per day, 13 days (1961 August 13-25)	156.00
Total	<u>\$505.31</u>

I have received a travel advance in the amount of \$500.00 out of my Institute travel account. I should be grateful to you if you would arrange for reimbursement of the balance of my expenses \$5.31, out of this account.

Sincerely,

Bengt Strömberg

pd
OK

14 August 1961

Memorandum to Mr. Morgan:

In Dr. Oppenheimer's absence I am authorizing the payment to Professor Meritt of \$17.97. This will cover the additional expenses of his trip to Greece in the spring and summer of 1961.

Verna Hobson

Copy to Professor Meritt

AMERICAN PHILOLOGICAL ASSOCIATION
 OFFICE OF THE PRESIDENT
 INSTITUTE FOR ADVANCED STUDY, PRINCETON, NEW JERSEY

9/21/60	To Passport Office Trenton	2.25
	Passport Renewal & registry	5.83
		10.00
10/1/60	Travelers Cheques	
	Station Wagon to N.Y.C. (#3683)	10.00
6/15/61		9.00
3/3/61	Typhoid, etc. inoculations	11.25
2/1/61	Vaccination	2.13
2/13/61	Trenton to AAA	
4/4/61	Ticket Brindisi-Igoumenitsa Adm	34.00
	Car	26.00
	AAA to Trenton	2.25
5/3/61	Ticket Patras-Brindisi Adm	48.00
	Car	28.00
		38.02
4/10/61	Channel Crossings Adm & Car	
4/10/61	AAA to Trenton	2.25
	" " "	2.25
12/2/60	" " "	2.25
12/2/60	" " "	6.00
10/3/60	Passport Photos	76.00
3/1/60	Car Insurance (Europe)	42.00
	Car Documents	3.00
4/1/61	One Typhoid Shot	
		<hr/> 360.48

AMERICAN PHILOLOGICAL ASSOCIATION
 OFFICE OF THE PRESIDENT
 INSTITUTE FOR ADVANCED STUDY, PRINCETON, NEW JERSEY

10/4/60 & 2/4/61	Cunard Passage Adm	364.50
4/12/61	Tolls to NYC and return station wagon	3.00
4/12/61	Tips & Food	3.04
4/13/61	Getting aboard Queen Elizabeth	3.80
4/17/61	On board Q. Elizabeth, tips, etc.	17.50
	Incidentals on Q. Elizabeth	12.25
4/18/61	Guide books from Southampton	5.70
4/19/61	Southampton to Dover (Adm)	9.57
4/19/61 - 5/3/61	Adm food & lodging 15x13	195.-
	Train through Götterheim tunnel	6.75
5/3/61 - 5/25/61	Rooms in Athens	135.00
5/7/61	Visit to East Coast	5.10
5/9/61	Ferry Skala Oropou & return	4.68
	Kymi to Skynos & return	7.35
5/13/61	Delphi (Adm)	14.80
5/23/61	Marathon & Rhamnous	13.50
5/25/61	Servant in Athens	20.00
		<hr/>
		821.54

AMERICAN PHILOLOGICAL ASSOCIATION
 OFFICE OF THE PRESIDENT
 INSTITUTE FOR ADVANCED STUDY, PRINCETON, NEW JERSEY

5/25/61	Tips in Archaeological Museum	9.00
	Book by Oikonomides	1.00
5/15/61	moving stone to Epigraphical Museum	4.00
	stamps for postage	7.00
5/2/61 - 5/25/61	Food @ \$2	50.00
5/9/61	Expense in Skycas Room	10.00
	Taxi	3.00
5/26/61 - 6/7/61	Room food & lodging 13x13	169.00
6/13/61	Expense on Q. Mary Tips. etc. includes debarcation	22.40
6/13/61	Tolls on Pike and in tunnel	1.55
5/18/61	Entertainment of Thespiades	12.00
5/24/61	Photographs in Epigraphical Museum	18.00
Standard Depreciation on Car		370.00
Operating Expense		
	England	7.02
	France & Switzerland	29.70
	Italy	32.88
	Greece	22.90
	Italy	20.00
	France	27.00
	England	7.45
	U. S. A. (N.Y.C.)	12.05
		<hr/> 835.95

AMERICAN PHILOLOGICAL ASSOCIATION
OFFICE OF THE PRESIDENT
INSTITUTE FOR ADVANCED STUDY, PRINCETON, NEW JERSEY

Summary of Expense

Sheet 1	360.48
Sheet 2	821.54
Sheet 3	835.95
Total	<hr/> \$ 2017.97

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

4 May 1961

Dr. Robert Oppenheimer
Institute for Advanced Study

Dear Robert:

I would be grateful to you for arranging reimbursement of travel expenses in the amount of \$159.26 in connection with my participation in the Space-Nuclear conference in Gatlinburg, Tennessee, May 3, 1961 (American Rocket Society and ORNL) to give an invited talk. Since the sponsors did not reimburse travel directly or by honorarium I would like to charge the expenses to my Institute travel account.

The expenses were as follows:

Taxi to station in Princeton and from Princeton Junction	\$ 3.50
Railroad fare Princeton-New York and return	4.60
Plane fare New York-Knoxville and return	103.29
Excess baggage wt. (300 preprints of talk)	5.06
Car rental Knoxville and airport to Gatlinburg and return	26.06
Hotel in Gatlinburg, 1 night	10.00
Meals in Gatlinburg	6.75
	<hr/>
	\$ 159.26

Sincerely,

Bengt

Bengt Strömberg

Approved RO

Date 5/5/61

Copy to: Mr. Morgan
Professor Strömberg

Fae Strömgren - Trav

3 January 1961

Memorandum to Mr. Morgan:

This will authorize you to charge Professor Strömgren's travel fund and pay him the sum of \$44.74, as reimbursement of his expenses in attending the December 28-30 meeting of the American Astronomical Society in New York.

Robert Oppenheimer

Copy to Professor Strömgren

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

31 December 1960

Dear Robert:

May I ask you to arrange for reimbursement out of my Institute travel account of expenses in connection with attending the meeting of the American Astronomical Society, December 28, 29 and 30 in New York, N.Y. My expenses were as follows:

Railroad Ticket Princeton - New York - Princeton	\$4.74
Taxis in Princeton and New York	4.00
Per diem, 3 days	36.00
Total expenses	<u>\$ 44.74</u>

The meeting was a very good one. Chin, Jhuang and Osterbrock gave nice papers.

Sincerely,

Bengt Strömberg

Dr. Robert Oppenheimer

September 6, 1960

Memorandum to Mr. Morgan:

This will authorize you to charge Professor Strömberg's travel fund and pay him the sum of \$60.81 for a trip Pasadena - Lick Observatory - Pasadena on August 10-11, 1960. The trip was for a conference with colleagues at Lick Observatory on a joint observing program. The expenses as follows:

Airplane ticket (voucher attached) L.A.- S.F. and return	\$35.31
Travel S.F. airport - Lick Observatory and return by rented car, 130 miles, 1 day and 1 hour	25.50
	<hr/> \$60.81

Please send check to Prof. Strömberg (registered) to the following address: Mount Palomar Observatory, Palomar Mountain, California.

Sincerely,

Robert Oppenheimer

Mr. Minot C. Morgan, Jr.

Prof. Strömberg

17 May 1960

Memorandum to Mr. Morgan:

This will authorize you to charge Professor Strömberg's travel fund and pay him the sum of \$300. It will also authorize you, as of July 1, 1960, to charge his travel fund and pay to his account at the Princeton Bank and Trust Co. the sum of \$700. These two sums are to defray the expenses of his travel this summer to Leiden and Copenhagen.

Robert Oppenheimer

Copy to Professor Strömberg

THE INSTITUTE FOR ADVANCED STUDY

PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

12 May 1960

p.t. Goddard Space Flight Center, Theoretical Division
8719 Bolesville Road
Silver Spring, Maryland

Dear Robert:

I expect to be leaving for Leiden and Copenhagen on June 16 and will return for the observing at Mount Palomar on July 23. I should be grateful to you for arranging for a travel advance toward the expenses for the trip to Europe in the amount of \$300.

If my arithmetic is correct there is just a little over \$300 in my travel account for the year ending 30 June 1960. After 1 July 1960

when the amount for travel the next year is available I would like to receive a second travel advance of \$700 for the Leiden - Copenhagen travel expenses. Since I am not going to be in Princeton the amount could perhaps be paid into my account with Princeton Bank and Trust Company,

With all best wishes,

Sincerely,

Bengt Strömberg

OK
RO

Dr. Robert Oppenheimer

6 September 1960

Dear Mr. Morgan:

Herewith I would request you to arrange for reimbursement out of my NSF research grant in the amount of \$23.98. The expense was for materials used during the present Mount Palomar observing period. Two invoices are attached.

Would you please mail the check to me to the following address: Dr. B. Strömgren, Mount Palomar Observatory, Palomar Mountain, California. Since the Post Office in question is small it might be well to register the letter.

Sincerely,

Bengt Strömgren

Mr. Minot C. Morgan, Jr.

THE INSTITUTE FOR ADVANCED STUDY, Princeton, New Jersey

Office of the Director

C O P Y

17 May 1960

Memorandum to Mr. Morgan:

This will authorize you to charge Professor Strömberg's travel fund and pay him the sum of \$300. It will also authorize you, as of July 1, 1960, to charge his travel fund and pay to his account at the Princeton Bank and Trust Co. the sum of \$700. These two sums are to defray the expenses of his travel this summer to Leiden and Copenhagen.

Robert Oppenheimer

✓ Copy to Professor Strömberg

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

8 April 1960

Dear Robert:

In July, 1959, I received a travel advance in the amount of \$1050.00. My expenses for the trip to Lick Observatory (July 6 - September 28, 1959) and the stay there amounted to \$969.09. Since all my other travel expenses during the year have been taken care of by my projects I have had no further expenses to be charged to my travel account. I enclose a check for the balance, \$80.91 for crediting to my travel account.

My expenses July 6 - September 28, 1959 were as follows:

Princeton, N.J. to Mount Hamilton, Cal. by private automobile, 10¢ per mile	\$325.00
Airplane San Francisco - Chicago, first class (coach not available)	140.09
Chicago to Princeton, N.J. by private automobile, 10¢ per mile	92.00
Motels and meals, seven days of travel	84.00
Excess baggage on plane and turnpike charges	31.00
Dislocation expenses, Mount Hamilton, 62 days, at \$3.50 per day	217.00
Trips from Mount Hamilton to San Jose, Cal. Stanford University and Berkeley, Cal. by private automobile, 10¢ per mile	<u>80.00</u>
Total	\$969.09

Sincerely yours,
Bengt Strömberg
Bengt Strömberg

Dr. Robert Oppenheimer

cc & check sent to Mr. Morgan

Strömberg
1 July 1959

Memorandum to Mr. Morgan:

In Dr. Oppenheimer's absence I am authorizing payment to Professor Strömberg of \$900., to be charged to his travel fund, as an advance for his expenses for professional travel as requested in his letter to you of July 1, 1959.

Verna Hobson

Copy to Professor Strömberg

July 1, 1959

Mr. Minot C. Morgan
The Institute for Advanced Study
Princeton, New Jersey

Dear Mr. Morgan:

I should be grateful to you for arranging to have a travel advance in the amount of \$900 paid to me, the amount to be charged to my travel account.

I am going to Lick Observatory, Mount Hamilton, California, where I will stay from July 26 till approximately September 20, and I will also visit Mt. Wilson and Palomar Observatories, California. I expect to leave Princeton on July 6.

Since I will need a car on Mount Hamilton, my transportation will be by private automobile. I am assuming that a charge of 7¢ per mile of distance by the shortest route will be in order when the actual travel expenses are computed. Would you be kind enough to advise me if I should be mistaken about this.

The present balance in my travel account is \$1272.87.

Sincerely yours,

Bengt Strömberg

cc: ✓ Dr. Robert Oppenheimer

29 June 1959

Mr. Minot C. Morgan
The Institute for Advanced Study
Princeton, New Jersey

Dear Mr. Morgan:

Herewith I am sending you the account for my travel expenses May 13 - 27, 1959. I visited McDonald Observatory, Texas; the AURA National Observatory, Tucson, Arizona; Mount Wilson and Palomar Observatories, Pasadena, California; Lick Observatory, Mount Hamilton, California; Astronomy Department, University of California, Berkeley, California.

The expenses were as follows (transportation from Pasadena to Lick Observatory was by private car, no expense):

Newark - Dallas, Plane	\$ 74.86
Dallas - Pecos, Texas, Rail	24.91
Kent, Texas - Tucson, Rail	32.00
Tucson - Los Angeles, Plane	36.03
San Francisco - New York, Idlewild	127.05
Excess weight on planes	9.50
Taxis to and from airports and railway stations, transportation to New York and from Idlewild	38.00
Hotels and motel, Dallas, Tucson, Turlock, Berkeley	33.66
Meals en route, May 13, 14, 19, 20, 21, 22, 24, 25, 26, 27	60.00
Telegrams and telephone	<u>29.00</u>

Total expenses \$465.01

Travel advance received 700.00

Check to IAS enclosed \$234.99

Sincerely yours,

Bengt Strömberg

Encl: 1 check and 8 vouchers
cc: Dr. Robert Oppenheimer

20 July 1959

Memorandum to Mr. Morgan:

Professor Strömgren has requested an additional advance of \$150. from his travel fund, to be deposited to his account in the Princeton Bank and Trust Co.

Verna Hobson

Copy to Professor Strömgren

THE INSTITUTE FOR ADVANCED STUDY

PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

18 July 1959

Dear Verna:

I was glad to talk to you over the telephone yesterday from Green Bay, and was relieved to know that the expected mail is en route to Lake Observatory. With regard to Dr. Crawford's report, it is all right that it was sent to Lick as I can just as well read it there. However, the mail sent to Lick instead of to Green Bay presumably contained a government check from Washington (which should actually have arrived before my departure) for \$147.40, and this has caused me a little trouble.

I would therefore request an addition to my travel advance in this amount, or if more convenient \$150, to be charged to my travel account, and should be very grateful to you if you would.

arrange to have the amount paid directly into my account (as my salary is). The account is: Joint account Sigrid and Bengt Strömgren, Princeton Bank and Trust Company.

We spent a very nice week near Green Bay and visited with both our daughters and their families. Now we have reached Duluth on our way to Lick Observatory. The weather has been very fine so far.

With kind regards,

Sincerely,

Bengt Strömgren

Mrs. Verna Holson

The Institute for Advanced Study, Princeton, N.J.

P.S. If you talk to Mr. Schuster again, please tell him that I am glad to receive his letter, and that I expect to make steps in Princeton under further notice.

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

22 April 1959

Mr. Minot C. Morgan
The Institute for Advanced Study

Dear Mr. Morgan:

During the month of May I expect to go to McDonald Observatory, Fort Davis, Texas, to the National Observatory near Tucson, Arizona, to the California Institute of Technology, Pasadena, California, and to Lick Observatory and Berkeley, California, for purposes of observing and preparing for future observations at Mount Wilson and Palomar Observatory and Lick Observatory.

I should be grateful to you if you would arrange for a payment of \$700 toward my travel expenses, to be charged against my travel account. The present balance of that account is \$728.38.

Sincerely yours,

Bengt Strömberg

Bengt Strömberg

cc: Dr. Robert Oppenheimer

22 April 1959

Memorandum to Mr. Morgan:

This will authorize you to charge Professor Strömberg's travel fund and pay him the sum of \$700 toward his travel expenses during the summer of 1959.

Robert Oppenheimer

Copy to Professor Strömberg

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

22 April 1959

Dr. Robert Oppenheimer
The Institute for Advanced Study

Dear Robert:

I would like to tell you about my travel plans for this spring and summer. For the completion of my present NSF project (narrow-band photometry of B8 and B9 stars) my associate Dr. David Crawford and I have the observing time with the McDonald Observatory 36-inch reflector from May 10 to June 30. I intend to go to the McDonald Observatory early in May and spend some days with Crawford at the beginning of the observing period. From McDonald Observatory I plan to go to the National Observatory Kitt Peak near Tucson, Arizona, to prepare for Crawford's observing period there with the 16-inch and 36-inch reflectors July 16 - September 16. From Tucson I will go to Pasadena to discuss with Greenstein and Bowen the plans for my observing at Mount Wilson and Palomar Observatories during 1960 and 1961. I am then going to Lick Observatory to prepare for my observations there later in the summer (July 26 - September 23) and to participate in a meeting during the weekend following May 23. After one or two days in Berkeley following the stay at Lick Observatory I expect to return to Princeton. I would stay here during the month of June.

About July 1 I expect to leave for Wisconsin, Sigrid and I hope to spend about three weeks there with the children on our way out to Lick Observatory. After about two months at Lick Observatory I will return to Princeton for the beginning of the autumn term.

If all goes well I should get a lot of good observational material, with altogether nearly six months of observing time during months that normally have very good weather. The observing after July 1 would be on the two new projects that we have talked about.

Sincerely,

Bengt

Bengt Strömberg

22 April 1959

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The Institute for Advanced Study

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Bengt Strömberg

22 April 1959

Mr. Minot C. Morgan
The Institute for Advanced Study

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I should be grateful to you if you would arrange for a payment of \$700 toward my travel expenses, to be charged against my travel account. The present balance of that account is \$728.38.

Sincerely yours,

Bengt Strömgren

cc: Dr. Robert Oppenheimer

6 March 1959

Memorandum to Mr. Morgan:

This will authorize you to charge Professor Strömgren's travel fund and pay him the sum of \$61.42, as reimbursement of his expenses in attending meetings in Washington last January.

Robert Oppenheimer

Copy to Professor Strömgren

3 March 1959

Mr. Minot C. Morgan
The Institute for Advanced Study
Princeton, New Jersey

Dear Mr. Morgan:

My travel expenses for a trip January 27, 28, 1959, to Washington, D.C. were as follows:

Railroad ticket and parlor car seat, roundtrip Trenton-Washington	\$32.15
Taxis to and from Trenton and in Washington	12.00
Hotel in Washington	9.27
Meals January 27 and 28	8.00
	<hr/> \$61.42

The purpose of the trip was discussions with representatives of the National Science Foundation and the Office of Naval Research, regarding possible projects in support of my research work.

I should be grateful to you if you would arrange for reimbursement of \$61.42 and charge the amount to my travel account.

Sincerely yours,

Bengt Strömgren

cc: Dr. Robert Oppenheimer

13 January 1959

Memorandum to Mr. Morgan:

This will authorize you to charge Professor Strömberg's travel fund and pay him the sum of \$110.20, as reimbursement of the balance of his expenses for travel in December, 1958, per statement attached.

Robert Oppenheimer

Copy to Professor Strömberg

12 January 1959

Mr. Minot C. Morgan, Jr.
The Institute for Advanced Study

Dear Mr. Morgan:

My travel expenses for the trip to Tennessee, Arizona and Texas last December were as follows:

Plane ticket New York-Nashville-Tucson and Marfa, Texas-Dallas - Chicago - New York	\$319.22
Railway and Pullman fare Tucson-Marfa	32.48
Excess weight charges on plane	9.00
Transportation to and from New York airport	10.00
Taxis in Nashville and Dallas	5.00
Hotel in Dallas	7.50
Meals en route December 9 - 13 and 21 - 23	20.00
Telegrams	<u>7.00</u>
Total expenses	\$410.20
Already received	<u>300.00</u>
Balance	\$110.20

I should be grateful to you to arrange for reimbursement of \$110.20, to be charged against my travel account.

Sincerely yours,

Bengt Strömberg

cc: Dr. R. Oppenheimer

See Strömberg

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

4 December 1958

Dr. Robert Oppenheimer
The Institute for Advanced Study

Dear Robert:

The plans for my trip to McDonald Observatory which we discussed a few weeks ago are now pretty definite. I shall leave December 9 for Vanderbilt University, Nashville, Tennessee, where I will meet my associate Dr. D. Crawford and test the instrumentation which we are going to use at McDonald. I will be giving a public lecture and a seminar while at Vanderbilt University.

From Nashville I plan to go to Tucson, Arizona, for a brief stay on the way to McDonald. The Offices of the new National Observatory on Kitt Peak are now located in Tucson. I have just recently had a letter from Dr. A.B. Meinel, Director of the National Observatory, inviting me to work on narrow-band photometry this next summer at Kitt Peak with the new 36-inch reflector that is going to be installed there this coming spring. Since most of the observing on my program at Kitt Peak could be done by an associate, I think this could well be combined with my planned summer stay at Mount Wilson and Palomar Observatories and Cal.Tech. I think that a discussion with Dr. Meinel in Tucson will prove very useful.

I expect to be at McDonald Observatory, Fort Davis, Texas, from December 13 to December 22. If all goes well, Dr. Crawford should then be able to carry on for the rest of the 30-day observing period at McDonald.

I estimate that the expenses in connection with this travel will be about \$300, and I should be grateful to you if you would authorize payment of this amount from my travel account.

On the way back from McDonald I hope to join Sigrid and the children and spend Christmas with them in Wisconsin. We will be back here around January 1. It looks as if we could move into the new house very soon after that.

Sincerely,

Bengt

Bengt Strömberg

Lee Strömberg

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

4 December 1958

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The Institute for Advanced Study

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Bengt Strömberg

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Sincerely,

Bengt Strömgren

4 December 1958

Memorandum to Mr. Morgan:

This will authorize you to charge Professor Strömberg's travel fund and pay him the sum of \$300, for expenses of travel to Tennessee, Arizona and Texas during the months of December 1958.

Robert Oppenheimer

Copy to Professor Strömberg

25 April 1958

Memorandum to Mr. Morgan:

In Dr. Oppenheimer's absence, this will authorize you to charge Professor Strömberg's travel fund and pay him the sum of \$800, for expenses of travel to England, Denmark and Russia in the summer of 1958.

Verna Hobson

Copy to Professor Strömberg

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY

SCHOOL OF MATHEMATICS

25 April 1958

Dr. Robert Oppenheimer
The Institute for Advanced Study

Dear Robert:

Herewith I would like to ask you to arrange for the payment of \$800 toward my travel expenses this coming summer.

I shall be leaving New York by plane for England on May 23. On May 27 I am to give the Halley lecture in Oxford on "The Composition of Stars and their Ages." I plan to spend the months of June and July in Denmark. During this period I will help my colleagues and the instrument shop at the new University Observatory to construct a photoelectric line intensity photometer which is planned as a copy of the instrument I am now using in the photometric work at McDonald Observatory. In August I shall go to Moscow for the I.A.U. meeting and will give an invited paper in the Symposium on the H - R diagram. I expect to be back in Princeton on September 5. My mailing address during my absence from Princeton will be: Until June 1, University Observatory, Oxford England. After June 1, Observatoriet, Østervoldgade 3, Copenhagen K, Denmark.

My travel expenses New York - London - Oxford - London - Copenhagen - Moscow - Copenhagen - New York will be approximately \$720, and I estimate that my other expenses during the stay in England will be \$80.

Sincerely,

Bengt

Bengt Strömberg