



The University of Western Ontario

Astronomy Department
London, Canada
N6A 3K7

1987 May 27

Dr. Béla Szeidl
Konkoly Observatory
1525 Budapest XII. Box 67
Hungary

Dear Dr. Szeidl:

Please excuse my long delay in answering your letter which our University post office misplaced so that I received it only yesterday.

I will prepare the report on "Variable Stars in Globular Clusters and Related Systems", and will try to send it to you at the end of August.

Sincerely yours,

Amelia Wehlau
Associate Professor

AW:gl



The University of Western Ontario

Astronomy Department
London, Canada
N6A 3K7

1987 August 21

Dr. Béla Szeidl
Konkoly Observatory
1525 Budapest XII. Box 67
Hungary

Dear Dr. Szeidl:

Enclosed is the report on "Variable stars in Globular Clusters and Related Systems" which you requested. However, I am afraid it has turned out to be longer than you wished.

I have put the references in the same style as we used three years ago and hope that will cause no problems.

Sincerely yours,

Amelia Wehlau
Associate Professor

AW:gl

Encls.



The University of Western Ontario

Astronomy Department
London, Canada
N6A 3K7

1987 November 02

Dr. Bela Szeidl
Konkoly Observatory
1525 Budapest XII. Box 67
Hungary

Dear Dr. Szeidl:

I am enclosing a copy of pages 4 and 5 of my review on "Variable Stars in Globular Clusters and Related Systems" in which new information on page numbers has been added to page 4 in two places. I have enclosed a second copy of that page which I have marked to show you where the changes occur.

It is probably too late to add these, however, I thought I would send them to you in any case.

Sincerely yours, ~

Amelia Wehlau

Amelia Wehlau
Associate Professor

AW:gl

Enc.

Sajnos késon érkezett

Mass loss rates are discussed and evidence is presented for circumstellar dust shells about these stars. Menzies and Whitelock (*MN* 212, 783) present JHKL photometry for 31 Mira variables in 15 galactic globular clusters and use it to obtain a period luminosity relation which differs from that found for LMC Miras. Whitelock (*MN* 219, 525) derives a P-L relationship which includes cluster variables with periods ranging from 1 to 300 days. Observations of 7 red variables are included in a paper on spectroscopic data for giants in ω Cen by Lloyd Evans (*SAAO Cir* 10, 1). A search for giant and asymptotic branch variables in 6 clusters by Welty (*AJ* 90, 2555) has found no variables below the tip of the giant branch although Yao (*Ap Sp Sc* 119, 41) presents evidence for the variability of 4 such stars in M4.

PULSATION MODES AND FOURIER ANALYSIS OF LIGHT CURVES

A review of double-mode RR Lyrae stars by Cox (*IAU Coll* 95 on *Faint Blue Stars*) includes work by Ostlie showing that double-mode behaviour may require time-dependent convection with a high helium content. Nemec (*AJ* 90, 240) has re-analyzed the double-mode variables in M15 using simulated photometry to determine the effects of random scatter on the derived periods and showing that the secondary oscillations are probably real. Nemec (*AJ* 90, 204) has also studied 10 double-mode stars in the Draco dwarf galaxy and compared their derived physical characteristics to those of double-mode stars in galactic globular clusters. In the Oosterhoff type I cluster IC 4499 (Cl452-820), Clement *et al* (*AJ* 92, 825) have identified 13 double-mode RR Lyrae stars and obtained a mean mass of 0.54, about 0.11 smaller than that found for Oosterhoff type II systems. However, thorough searches by Nemec and his collaborators have failed to find any double-mode RR Lyraes in ω Cen or M5.

Cox and Proffitt (*Ap J*, 1988) present detailed pulsation studies of the anomalous Cepheids in the Draco galaxy and galactic globular clusters, but find they are not able to distinguish between fundamental and first overtone pulsation for any of the stars. The question of second-overtone pulsation in RR Lyrae stars has recently been discussed by Stothers (*Ap J* 319, 260) who concludes that such pulsators probably do not exist among RR Lyrae stars although Stellingwerf *et al* (*Ap J* 313, L75) feel such stars might exist.

Peterson reports on Fourier analysis of the RR Lyrae light curves in ω Cen (*AA* 139, 496) and M15 (*AA* 170, 59). Although the ω Cen light curves exhibit a Cepheid-like progression for both the overtone variables and the fundamental mode variables with periods from 0.5 to 1.5 day, confirmation or disproof of such a sequence in M15 requires better observations than currently available. Kovacs *et al* (*Ap J* 307, 593) compare their Fourier decomposition parameters for variables in the two Oosterhoff I clusters, NGC 6171 (M107, Cl629-129) and NGC 6723 (Cl856-367), to those in the Oosterhoff II cluster M15 and find there may be small systematic differences between the two Oosterhoff classes. In a study of Fourier coefficients of RR Lyrae stars in NGC 6171 Stellingwerf and Dickens (*Ap J*, 322, 133) point out that the stellar light curves are not sensitive to composition or interior structure of the star. Several globular-cluster stars are included in a study of Fourier phases of Type II Cepheids by Petersen and Andreasen (*AA*, 176, 183).

CATAclysmic BINARIES AND X-RAY VARIABLES

Shara and his collaborators present observations of an outburst of the dwarf nova V101 in M5 (*AJ* 94, 357) and report that a search for cataclysmic binaries in M3 found no bright emission-line sources between 4 and 30 core radii from the center (*IAU Symp* 113, 103). Margon and Bolte (*Ap J Lett*, 321, L61) found no optical evidence of cataclysmic binaries in ω Cen despite a thorough search. Another such search by Shara *et al* (*AJ*, 1988) in two fields in ω Cen and one in

47 Tuc (NGC 104, C0021-723) was equally unsuccessful, indicating a density of contact binaries at least 8 times lower than in the solar neighborhood. On the basis of CCD photometry Shara *et al* (*ApJ* 311, 796) suggest an optical candidate for nova 1938 in M14 (NGC 6402, C1735-032). A search for millisecond pulsars by Hamilton *et al* (*AJ* 90, 606) turned up one source in M28 within one core radius of the center of the cluster, later confirmed by Erickson *et al* (*ApJ* 314, L45). Lyne *et al* (*Nature*, 328, 399) find a period of 3054 μ s and no evidence for a binary period. CCD U-band photometry by Ilovaisky *et al* (*AA* 179, L1) indicates an orbital period of 8.537 hours for the x-ray binary in M15 in agreement with the spectroscopic period found by Naylor *et al* (*IAUC* 4263) and the x-ray period of Hertz (*IAUC* 4272). Verbunt (*ApJ* 312, L23) presents mechanisms for cluster binaries containing a white dwarf and a neutron star as is indicated by the discovery by Stella *et al* (*ApJ* 312, L17) of a 685 sec orbital period for the x-ray source in NGC 6624 (C1820-303). Data on this source are also used by van Paradijs and Lewin (*AA* 172, L20) to derive constraints on the mass-radius relation for the neutron star.

Amelia Wehlau.

Amelia Wehlau presents a preliminary report on her study of the properties of random scatter and the derived periods and showing that the secondary oscillations are probably real. Jones (*AJ* 90, 294) has also studied 10 double-mode stars in the Large Magellanic Cloud and compared their derived physical characteristics to those of double-mode stars in galactic globular clusters. In the Gesterhoff type I cluster NGC 5904 (C1835-430), Clement *et al* (*AJ* 92, 433) have identified 13 double-mode RR Lyrae stars and obtained a mean mass of 0.54, about 0.11 smaller than that found for Gesterhoff type II systems. However, thorough searches by Jones and his collaborators have failed to find any double-mode RR Lyrae stars in ω Cen or M3.

Lee and Griffin (*ApJ*, 1988) present detailed pulsation studies of the anomalous Cepheids in the Large Magellanic Cloud and galactic globular clusters, but find they are not able to distinguish between fundamental and first overtone pulsation for any of the stars. The question of second-overtone pulsation in RR Lyrae stars has recently been discussed by Stellingwerf (*ApJ* 319, 269) who concludes that such pulsations probably do not exist among RR Lyrae stars although Stellingwerf *et al* (*ApJ* 313, 178) feel such stars exist.

Research reports on Fourier analysis of the RR Lyrae light curves in ω Cen (*AA* 179, 456) and M15 (*AA* 179, 57). Although the ω Cen light curves exhibit a Cepheid-like progression for both the overtone variables and the fundamental mode variables with periods from 0.5 to 1.5 day, confirmation or disproof of such a sequence in M15 requires better observations than currently available. Reports of Fourier analysis of RR Lyrae stars in the Gesterhoff 2 clusters, NGC 5904 (C1835-430) and NGC 6101 (C1836-37), to those of the Gesterhoff II cluster M3 and find there may be small systematic differences between the two Gesterhoff clusters. In a study of Fourier coefficients of RR Lyrae stars in NGC 5171 Stellingwerf and Dickens (*ApJ* 322, 137) point out that the stellar light curves are not sensitive to composition or interior structure of the star. Several globular cluster stars are included in a study of Fourier phases of Type II Cepheids by Patterson and Anderson (*AA*, 176, 183).

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Observatoire de Genève, le April 17
1290 SAUVERNY (GE), SUISSE

1970

OBSERVATOIRE

DIRECTEUR: PROF. MARCEL GOLAY

Dr. B. Szeidl
Konkoly Observatory
BUDAPEST XII
P. O. 114, Box 67
Hongrie

Dear Dr. Szeidl,

Thank you for your letter of March 18 clarifying the situation of Dr. Marik's membership to the IAU.

I am sorry to learn that you wish to retire as member of Commission 46, which you are until the end of the General Assembly of the IAU in Brighton. In the name of the Commission 46 I wish to thank you for your helpful collaboration within the Commission. We shall be pleased to welcome Dr. Marik as new member of the Commission, acting as Hungarian representative in the Commission, as soon as he has been nominated IAU member.

Hoping to see you in Brighton, I am with best wishes

Yours sincerely

Edith A. Müller

Edith A. Müller

President of Commission 46 of the IAU



OBSERVATOIRE

CH - 1290 SAUVERNY, LE 22. Dezember, 1967

Herrn Prof. Dr. L. Detre, Direktor
Konkoly Observatory
P. O. 114, Box 67
Budapest XII
Hongrie

V./RÉF.

N./RÉF. IAU Com. 46

TÉL. (022) 55 26 11

C.C.P. 12-2130

Lieber Herr Detre,

Vielen Dank für Ihre prompte Antwort auf meine Anfrage betreffend eines Vertreters von Ungarn als Mitglied in der IAU Kommission 46 (Teaching of Astronomy).

Ich werde gerne Herrn Dr. B. Szeidl vom Konkoly Observatory als Mitglied meiner Kommission aufnehmen und werde mich in den nächsten Tagen mit ihm in Verbindung setzen und ihm unser Arbeitsprogramm unterbreiten.

Nun möchte ich die Gelegenheit benutzen, Ihnen und Ihrer Gattin meine allerbesten Wünsche für den Jahreswechsel zu entbieten.

Mit freundlichen Grüßen

Edith A. Müller

Edith A. Müller



OBSERVATOIRE

CH - 1290 SAUVERNY, LE January 22, 1970

Dr. B. Szeidl
Konkoly Observatory
P. O. Box 67, P. O. 114
BUDAPEST XII
Hungary

V./RÉF.

N./RÉF. IAU Com. 46

TÉL. (022) 55 26 11

C.C.P. 12-2130

Dear Dr. Szeidl,

With your letter of December 10 you proposed Dr. M. Marik of the Eötvös University as Consulting Member of the IAU Commission 46.

I may now inform you that the Organizing Committee of my Commission has accepted Dr. Marik as Consulting Member. However, before inviting him officially, I should clarify one point. It seems to me that with Dr. Marik's qualifications as astrophysicist he should be proposed by the Hungarian National Committee on Astronomy as regular member of the IAU. Consulting Members are actually such persons who are not eligible for IAU membership. If Dr. Marik is going to be proposed as IAU member he does not need to be a Consulting Member of our Commission because any regular member can listen to any Commission meetings during the General Assemblies, and present his ideas and comments.

I should be most grateful to you if you could clarify the question of Dr. Marik's eligibility for IAU membership at your earliest possible convenience so that I can act accordingly as soon as possible.

With kindest regards

Edith A. Müller

Edith A. Müller

Prof. Edith A. Müller
Observatoire de Genève
1290 Sauverny (GE)
Switzerland

December 5, 1967

I. A. U. Commission 46 on the TEACHING OF ASTRONOMY.

Dear colleague:

During the Prague meetings of the International Astronomical Union it was decided that the Organizing Committee of Commission 46 should remain small, but that each member nation of the I. A. U. should designate one member interested in the teaching of astronomy to join the Commission as a member in order to enable the Commission to keep in touch with the educational programs and problems in all countries. It was agreed that each member nation of the I. A. U. be invited to designate one member of Commission 46 who is to be selected according to his capabilities and his interest in promoting the teaching of astronomy in his own country. Each member will be responsible to keep in touch with the Commission President informing her about the teaching of astronomy in his own country, i.e. the programs and developments, the problems and the needs of astronomical education at all levels.

Astronomers from all parts of the world know each other by their scientific work rather than by their teaching abilities and interests. Therefore, it was agreed that - unless otherwise proposed by the Commission President - the head of each national delegation and the national correspondent of adhering organizations be asked to propose an astronomer of their country who may become member of Commission 46.

With this circular letter I ask you to propose an astronomer of your country as member of Commission 46. The astronomer must fulfil the above mentioned requirements. An early reply will be greatly appreciated. We wish to establish a fruitful collaboration among astronomy teachers of all levels as early as possible.

Thanking you in advance for your helpful cooperation, I am

December 15, 1967 Sincerely yours

Edith A. Müller

Edith A. Müller, professor
President of Commission 46

Dear Colleagues:

I thank you for your circular letter of December 5, 1967. I propose ^{to be a} member of Commission 46 Dr. B. Székely as representative of Hungary. He became a member of the I. A. U. at the Prague meeting, his address is: Konkoly Observatory, Budapest XII, P.O. Box 67. Sincerely yours
with best wishes for Christmas and the New Year, E. Müller

December 29, 1974

Dr. Walter S. Fitch
University of Arizona
Steward Observatory
Tucson, Arizona 85721
U.S.A.

Dear Dr. Fitch,

Our Academy of Sciences and the Local Organizing Committee were very pleased to learn of your proposal that somehow we should dedicate Colloquium No.29 to honour the memory of Prof. Detre. Perhaps you should make an official move in connection with this at the Assistant General Secretary. I deem it an honour if I can deliver a memorial talk.

Now I should like to inform you about the progress in organizing the Colloquium.

- 1./ The preliminary program is planned
1975 August 31, September 1,2 : Registration
September 1, evening: Reception
September 4, afternoon: Excursion
September 5, evening: Closing Dinner
The meetings would be held about 9-12 a.m. and 2-5 p.m. every day.
- 2./ The list of the participants should arrive at the Hungarian Academy of Sciences not later than May 15, 1975. This dead-line is especially important in the "difficult" cases /citizens of Chile, South Africa, Israel and Republic of China/.
- 3./ As time presses, in order to gain time, may I propose that I should send the participation forms to those you invite. I could make it quite easy as soon

as you send the list. In this way hotel reservation and other things could be done easier.

If you think necessary to make a second announcement in IBVS we can also do it without difficulty.

4./ The Publishing House of the Hungarian Academy of Sciences plans to make the publication with the so-called camera-ready process. Concerning the Bookselling the Publishing House will initiate negotiations with the Reidel Publishing Company. Since I am entirely ignorant of these matters I should like to know your as Editor's opinion and conditions. Now the Publishing House is unwilling to pay and is only willing to give about 20 author's copies to each contributor.

I wish you a happy New Year.

Sincerely yours

Béla Szeidl



STEWART OBSERVATORY
THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721, U.S.A.

November 2, 1973

Circular Letter to Members of the Scientific Organizing Committee for IAU Colloquium No. 29 (M. W. Feast, B. V. Kukarkin, P. Ledoux, J. Smak, R. S. Stobie, B. Szeidl, B. Warner, S. C. Wolff).

Dear Colleagues:

As you will see from the enclosed tentative program, I sincerely hope you can accept membership on this committee. In order to expedite arrangements, I will assume this to be the case in the event I do not receive a reply from you prior to 1 January 1974.

I believe that the success of this colloquium will hinge on a good balance between observational and theoretical work, and on a very careful selection of contributed papers. The meeting will run from Monday through Friday, with, I assume, a one day field trip to the mountain station of the Konkoly Observatory. Therefore there should be sufficient time for four morning and four afternoon sessions, and I suggest that one session each be devoted to the eight topics listed on the tentative program. Further, I would prefer that each section chairperson accept the responsibility of presenting a paper on either a general review of the subject area or on a specific subtopic, but in the latter case suggesting at least one other speaker well-qualified to give the general review. Should the chair decline the opportunity to speak, I respectfully request he (she) suggest names for two (or more) alternative speakers, listed in order of preference. If the review talk is given 40 minutes, the invited talk 30 minutes, and we have no more than 3 contributed papers of 20 minutes each, there will be 50 minutes total left for discussions during each 3 hour session. This kind of schedule probably implies that many otherwise willing speakers will not be heard, so we shall have to be rather selective in accepting contributed papers.

I have a long standing interest in many types of multiperiodic stars, and also a modest familiarity with some of the work which has been done, so I have made some very tentative suggestions as to possible invited speakers. I hope that you will all please confirm, freely revise, or reorder the names I have suggested, not only for your own section but also for any area you have a particular interest in. I especially request that Prof. Kukarkin assist in dispelling my rather severe lack of familiarity with the work done by our Russian colleagues on multiperiodic stars.

There is available only a very modest budget of at most \$1,500 for the colloquium, so we will not be able to provide very significant travel aid. Since travel funds are not now so easy to obtain, at least in the U.S., we may lose some otherwise available speakers. Therefore it would be well to have alternative choices listed for invited speakers.

I hope to receive soon from each of you an acceptance and your suggestions on improvements to the tentative program enclosed. I will start trying to enlist invited speakers next January.

Sincerely yours,

Walter S. Fitch

Walter S. Fitch

WSF/dab

Enclosures.

Tentative Scientific Program for IAU Colloquium No. 29

on

Multiple Periodic Variable Stars

to be held on 1 - 5 September 1975 in Budapest, under sponsorship of IAU
Comm. 27 (and, possibly, Comm. 42)

Suggested Scientific Organizing Committee: Fitch, Chairman; Feast, Kukarkin,
Ledoux, Smak, Stobie, Szeidl, Warner, Wolff.

Local Organizing Committee: L. Detre, Chairman; J. Balazs, K. Barlay, M. Ill,
S. Kanyo, L. Szabados (all members of the Konkoly Observatory), and L. Dobos
of the Hungarian Academy of Sciences.

Contact addresses: L. Detre, 1121 Budapest, Konkoly Thege M.ut 13/17, Hungary.
W. S. Fitch, Steward Observatory, University of Arizona, Tucson, Arizona 85721
U.S.A.

Editor of Colloquium Proceedings: Fitch

Preliminary Program; Section Chairpersons; Possible Invited Speakers

1. β Canis Majoris Stars; P. Ledoux; van Hoof, Shobbrook, Osaki, Percy.
2. Cepheids; R. S. Stobie; J. P. Cox, Rodgers.
3. Mira Variables; M. W. Feast; Keeley
4. White Dwarfs and Novae; B. Warner; van Horn, Rose, Hesser, Kraft, Simon,
Sastri.
5. Magnetic Variables; S. C. Wolff; Mihalas, Preston, Mestel, Borra
6. RR Lyrae Stars; B. Szeidl; Iben, Baker.
7. δ Scuti and RRs Stars; W. S. Fitch; J. O. Petersen, Breger, Chevalier.
8. Eclipsing Variables; J. Smak; Kopal.

KONKOLY OBSERVATORY
BUDAPEST XII,
P O 114. Box 67
HUNGARY

Dr. W.S. Fitch
Steward Observatory
The University of Arizona
Tucson, Arizona 85721, U.S.A.

December 10, 1973

Dear Dr. Fitch,

I am pleased to accept the membership on the Scientific Organizing Committee for the IAU Colloquium No. 29.

If you agree to I would give the general review on the problem of multiperiodic RR Lyrae stars. Since I prefer to speak rather of observational facts one of the possible invited speakers you have suggested can give a more detailed lecture of theoretical aspect.

Wishing you a merry Christmas and happy New Year,

Yours sincerely,

Bála Szeidl



THE UNIVERSITY OF ARIZONA

TUCSON, ARIZONA 85721

STEWART OBSERVATORY
February 2, 1977

Dr. B. Szeidl, Director
Konkoly Observatory
1525 Budapest XII, Box 67
Hungary

Dear Bela:

Your very welcome letter of 17 December was waiting for me when I got back here a couple of weeks ago, and then yesterday I received a copy of each volume of the Proceedings. I think you are to be congratulated for having achieved a beautiful pair of books under extremely difficult circumstances. I really am very sorry you had such a terrible time with arrangements. Certainly life would have been much simpler for you had Prof. Detre completed the publication agreement before his untimely death. At least, you now have the experience so that if you don't succeed in ducking out from under the work load of some future colloquium, you will be able to dispose of it with much less unpleasantness.

I would like to try to tell you how very privileged I feel to have had the opportunity to work with you on this meeting, and how very much I enjoyed your most gracious hospitality.

My very best regards,

Walt Fitch

Walter Fitch

WF/ret

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fm arthur n cox ms-b288 los alamos national laboratory

los alamos nm 87545

to b szeidl president iau commission 27 kontoli observatory budapest
xii hungary

t-tlx-no 227460 konob h

acct ae-xnae

unclas

thanks for the letter about commission 27 activities at the general assembly of the iau next august. as always, i am in favor of scientific sessions. my opinion is that there should be two or even more 1.5 hour meetings where one has a potpourri of 15 minute papers reporting results of member's latest research. the session title could be general scientific.

in this regard, if appropriate, i would like to present our latest data on calculations of the structure and composition of prewhite dwarf pulsators. just the fact that some of these stars, like pg 1159-035 and k1-16, as well as a half dozen others, are seen to pulsate in several modes, can be used to determine with some
page 2 rheglaa5953 unclas

accuracy their masses, radii, luminosities, and even compositions in the pulsation driving layers. this research is being done in collaboration with sumner starfield here at los alamos.

you might want to consider a specialized session on a topic like precision photometry, stellar seismology, or even a session on the masses of the yellow giant variable stars. it might be a good idea to get michael breger to organize the speakers for this dedicated topic meeting.

then, of course, you need to get together the date for the traditional business meeting. that in itself takes considerable preparation.

i have been discussing with daiichiro sugimoto and morris aizenman the idea that once again there should be an informal session on the puzzling pulsating b stars. i believe that it will be part of the commission 35 sessions, but your commission should participate as you feel appropriate.

i have no comments about your other two items in your january 15 letter.

nnnn

1331 est

⊕

227460 konob h

Los Alamos

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

DATE: August 18, 1987
IN REPLY REFER TO: T-6
MAIL STOP: MS B288
TELEPHONE: (505) 667-7648

Dr. Bela Szeidl
Konkoly Observatory
Box 67
1525 Budapest
Hungary

Dear Bela:

Thanks for the letter about a month ago. I am slow in responding, but I did have the opportunity to speak to Michael Breger on the telephone a few days ago about possible new Vice President candidates. I strongly support John Percy as the next one, because he has been very active in Commission 27 business.

There has been some worry in the Executive Committee that the system of Commission leaders is not democratic. That might be true, and Commission 35, where I was President for three years, adopted a new procedure with the meeting at Montreal in 1979. Sugimoto, our current President, sent out a call for nominations for Vice President and for rotating Organizing Committee members last March or so. He specified that please get permission from the nominee, especially for Vice President. The mail ballots with three or four names for Vice President and about a dozen for the Organizing Committee were sent out in May, and the ballots were counted in Tokyo by an impartial committee early July. We elected Kippenhahn as our new Vice President, but then he announced that he could not serve and was never asked! Our next Vice President is then Demarque.

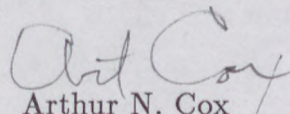
I suggest that this method be started by Breger after the next General Assembly. It does take effort on the part of the President, but it is democratic. Actually I wrote a news story about this method in the newspaper during the India General Assembly.

I think your authors for the sections of the triennial report are great. Actually I have been in touch with Percy, Breger, Wehlau, Winget and Christensen-Dalsgaard so that they know of my latest research.

The new Commission members are fine. You will probably be asked by others that become IAU members at Baltimore; the more the better if they are active.

Good luck at your RR Lyrae variable meeting in the coming weeks. My greetings to the participants. See you at Baltimore.

Sincerely yours,


Arthur N. Cox

Los Alamos

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

March 14, 1985

T-6

Mail Stop B288

(505) 667-7648

Dr. Bela Szeidl
Konkoly Observatory
Box 67
1525 Budapest
Hungary

Dear Dr. Szeidl,

This letter is being sent to all those listed below involved in the IAU Joint Discussion III.

Most of a year ago I suggested to the IAU Commissions 12, 27, 35, and 36 that we might think about a Joint Discussion on Solar and Stellar Nonradial Oscillations to be held during the next General Assembly in India, 19-28 November 1985. The Presidents of these Commissions have discussed this proposal among their Organizing Committees, and a formal proposal was submitted by me to the Executive Committee on behalf of these Commissions. The idea was accepted, and it is officially Joint Discussion III, to be held in four sessions on November 22. This letter is an invitation those named to speak on the topic listed below.

We justified this Joint Discussion by the following statement: New observing techniques and new understandings of stellar stability have produced many new results concerning the widespread nonradial oscillations in many classes of stars. Discussions of these results for a given class of stars, such as the ZZ Ceti white dwarfs or the supergiants, would be interesting in themselves. However, it seems valuable to have a meeting to discuss all these classes of nonradial pulsators in order to promote the exchange of ideas. This exchange, which can be done better at a General Assembly than almost anywhere else, would help particular workers in each class of variable stars to better understand his own current frontiers.

The Scientific Organizing Committee is: Cox (USA, Chairman), N.H. Baker (USA), J. Christensen-Dalsgaard (Denmark), B. Gustafsson (Sweden), A. Maeder (Switzerland), R.W. Noyes (USA), J.R. Percy (Canada), D. Sugimoto (Japan), B. Szeidl (Hungary), and B. Warner (South Africa).

The program will consist of 9 speakers on the following topics:

Session I: Chairman A.N. Cox/D. Sugimoto

Introduction	5 minutes	A.N. Cox
ZZ Ceti and DB White Dwarf Variables	30 minutes	D.E. Winget
PG Variables	20 minutes	A.N. Cox
Delta Scuti and Ap Star Variables	20 minutes	D.W. Kurtz

3/14/85:Art Cox

Session II: Chairman R.W. Noyes

Solar and Solar-Like Oscillation Observations	30 minutes	J.W. Harvey
Solar and Solar-Like Oscillation Interpretations	30 minutes	D.O. Gough

Session III: Chairman N.H. Baker

Beta Cephei Variables	30 minutes	Y. Osaki
Nonradially Pulsating B Stars	30 minutes	D. Baade

Session IV: Chairman B. Gustafsson

Be Star Variables	30 minutes	J.R. Percy
Supergiant and Wolf-Rayet Star Variability	30 minutes	A. Maeder

Having reviewed different topics in talks over the years, I know how difficult it is to make a presentation that reasonably covers the recent research work. Please try to present important work by others, but of course your recent studies should be a big part of the presentation. Also, be aware of the others that are reviewing neighboring research areas, and try to coordinate with them as appropriate.

The session chairman will be planning a 15 minute discussion after your talk where informal comments can be made from the audience as well as questions to you. Speakers must be prepared to cover their topic in a way that introduces their class of nonradial pulsator and relates it to the other classes, but they also must cover most of the recent developments.

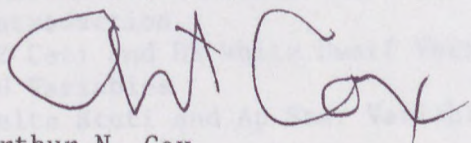
The proceedings will be published in the IAU Highlights, Volume 7 (1986). Individual manuscripts are due in Paris at the IAU offices by January 31, 1986. While I do not plan to make any changes in your camera ready manuscript sheets, it will help the Secretariat if I collect the whole package by January 1, 1986.

Let me know soon if you need any facility for movie film projection. Otherwise, equipment for the 5×5 slides and overhead viewgraphs will be provided.

Travel to India will be expensive for most all the speakers. The IAU has no special fund for Joint Discussion speakers; there will be more than 50 of them! We want you to be our speakers, but also we want to know soon if your trip will not be possible. Many other well qualified astronomers are on our list as backups which will retain our balance between observers and theoretical interpreters and between the various IAU member countries.

I am enthusiastic about hearing your presentations. Please let me know your plans for participation as soon as possible.

Sincerely yours,



Arthur N. Cox
President, Commission 35

AC851:Q

CY: CRM-4, MS A150

Los Alamos

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

February 1, 1985

T-6

Mail Stop B288

(505) 667-7648

Dr. Bela Szeidl
Konkoly Observatory
Box 67
1525 Budapest
Hungary

Dear Dr. Szeidl,

This letter about Commission 35 business is going to the members of the Organizing Committee and seven others who are members of the Scientific Organizing Committee for the IAU General Assembly Joint Discussion III Solar and Stellar Nonradial Oscillations. Here I propose a trial list of speakers for this JD III to supplement the preliminary program sent to West for publication in the Information Bulletin next month. The Scientific Organizing Committee is: Cox (USA, Chairman), N.H. Baker (USA), J. Christensen-Dalsgaard (Denmark), B. Gustufsson (Sweden), A. Maeder (Switzerland), R.W. Noyes (USA), J.R. Percy (Canada), D. Sugimoto (Japan), B. Szeidl (Hungary), and B. Warner (South Africa).

The program will consist of 9 speakers on the following topics:

Session I - Chairman A.N. Cox/D. Sugimoto

Introduction	5 minutes	A.N. Cox
ZZ Ceti and DB White Dwarf Variables	30 minutes	D.E. Winget
PG Variables	20 minutes	A.N. Cox
Delta Scuti and Ap Star Variables	20 minutes	D.W. Kurtz

Session II - Chairman R.W. Noyes

Solar and Solar-Like Oscillation Observations	30 minutes	J.W. Harvey
Solar and Solar-Like Oscillation Interpretations	30 minutes	Christensen-Dalsgaard

Session III - Chairman N.H. Baker

Beta Cephei Variables	30 minutes	Y. Osaki
Nonradially Pulsating B Stars	30 minutes	D. Baade

Session IV - Chairman B. Gustufsson

Be Star Variables	30 minutes	J.R. Percy
Supergiant and Wolf-Rayet Star Variability	30 minutes	A. Maeder

The above listed speakers are my best guesses based on suggestions from many of you. Since I want to start inviting speakers within a month, let me know your comments right away if you have any.

For the Commission 35 members, I am sending all members of our Commission a letter about a new Vice President and Organizing Committee members, our

IAU Commission 35/Cox, 2/1/85

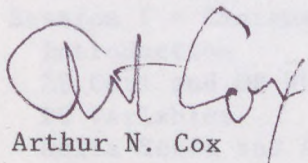
Reports on Astronomy 1985 contribution, our participation in three Joint Discussions, and General Assembly activities.

Just to keep you informed, upcoming international IAU Symposia and Colloquia sponsored by our Commission are: Symposium 116 "Luminous Stars and Associations in Galaxies" Porto Heli, Greece, May 26-31, 1985, Colloquium 89 "Radiation Hydrodynamics in Stars and Compact Objects" Copenhagen, Denmark, June 11-20, 1985, Colloquium 87 "Hydrogen Deficient Stars and Related Objects" Bangalore, India, November-December, 1985, and an as yet unnumbered Symposium "Advances in Helio- and Asteroseismology" Aarhus, Denmark, July 7-12, 1986.

After the last meeting of the Executive Committee, Hanbury Brown wrote a letter to Chandrasekhar asking him if we, the IAU, could hold a Joint Discussion or something like that in his honor at the India General Assembly. Chandra politely refused, and if there is anything such as a ceremony or whatever, it will not directly involve Commission 35. I have always indicated to Hanbury Brown and West that we support any appropriate honor the Executive Committee suggests, but it now seems that Chandra has been his usual modest self and will not participate in any substantial activity. Chandra was very appreciative of the efforts of us all.

Best wishes. Let me know your feeling about our JD III soon. You can all help me with these hard choices.

Sincerely yours,



Arthur N. Cox

AC851:E

enc: a/s

CY: CRM-4, MS A150

Los Alamos

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

DATE:
IN REPLY REFER TO:
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TELEPHONE:

November 13, 1984
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Dr. Bela Szeidl
Konkoly Observatory
Box 67
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Hungary

Dear Dr. Szeidl,

The Executive Committee of the International Astronomical Union has accepted a proposal from Commissions 12, 27, and 35 to have a day-long Joint Discussion on "Solar and Stellar Nonradial Oscillations" at the next General Assembly in India. This will be JD III. I have received responses from the Presidents of these three Commissions discussing proposed members of the Scientific Organizing Committee. Barring any further suggestions or directives, the SOC is proposed to consist of A.N. Cox, Los Alamos (Chairman); N.H. Baker, Columbia; J. Christensen-Dalsgaard, Copenhagen; B. Gustafsson, Uppsala; A. Maeder, Geneva; R.W. Noyes, Harvard; J.R. Percy, Toronto; D. Sugimoto, Tokyo; B. Szeidl, Budapest; and B. Warner, Cape Town. My first question is: Can you help us get together a scientific program and speakers?

The available time for our Joint Discussion is four 1 1/2 hour sessions. I think that allows us to have only eight speakers for just over 30 minutes each. After each speaker (topic) we can have up to 15 minutes discussion. This will allow introduction of new results, but not in any formal way. The speakers must be prepared to cover their topic in a way that introduces their class of nonradial pulsator and relates it to the other classes, but also they must cover most of the recent developments. They must also deliver a written version of their review by January 31, 1986.

During the discussions about this JD, that go back to last April, we have proposed (in order of luminosity) the classes: ZZ Ceti variables, Sun, Delta Scuti and Ap variables, PG variables, 53 Per variables, Beta Cephei variables, Be variables, and the Supergiant and Wolf-Rayet variables. The idea is to have half of these topics presented by observers and half by theoreticians, with emphasis in all cases on interpretations of the observations in terms of current theory.

By December 15, we need to get to Dr. West, the IAU General Secretary, a program and a SOC list for publication in the next Information Bulletin which appears next February. Several of us have proposed that the announcement should consist of a list of topics (probably the above list) but no speakers. We can discuss the speakers until early next year, but due to

Cox, Nov. 13, 1984

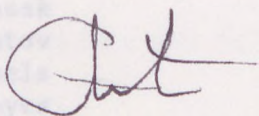
Solar and Stellar Spectral Oscillations Possible Speakers:

33 Core Variables - 30 minutes

travel problems involved in getting all the way to India for most astronomers, we need to approach potential speakers by next January or February. It is likely that we will need to ask in turn several speakers for each topic, because the first priority ones may simply not be able to attend the General Assembly. I enclose a list of possible speakers some of which Noyes, Baker, Gustafsson and I have considered. Your ideas are requested now, if you are able to serve on our SOC.

I hope that you can help us in this organization, and I look forward to receiving your early response at least as to whether you can serve on the SOC.

Sincerely yours,



Arthur N. Cox

AC843:F

enc: a/s

CY: CRM-4, MS A150 Variables - 30 minutes

Beglin

Bregier

Fitch

Kurtz

Leighton

McQuinn

Peacock

Sastry

PG Variables - 30 minutes

Bond

Cox

Starrfield

53 Period Variables - 30 minutes

Beads

Smith

Vogt

Walker

Solar and Stellar Nonradial Oscillations Possible Speakers:

ZZ Ceti Variables - 30 minutes

Robinson
Van Horn
Warner
Winget

Sun - 30 minutes

Berthomieu
Brown
Christensen-Dalsgaard
Fossat
Gough
Harvey
Hudson
Issak
Kotov
Noels
Noyes
Provost
Severny
Scherrer
Shibahashi
Ulrich
van der Raay

Delta Scuti and Ap Variables - 30 minutes

Baglin
Breger
Fitch
Kurtz
LeContel
McNamara
Petersen
Sareyan

PG Variables - 30 minutes

Bond
Cox
Starrfield

53 Persei Variables - 30 minutes

Baade
Smith
Vogt
Walker

Solar and Stellar Nonradial Oscillation Possible Speakers (cont'd)

Beta Cephei Variables - 30 minutes

Ando
Balona
Cox
Dziembowski
Jerzykiewicz
Osaki
Shobbrock
Sterken

Be Variable Stars - 30 minutes

Feinstein
Harmanec
Percy
Slettebak

Supergiant and Wolf-Rayet Star Variability - 30 minutes

Burki
Chiosi
Maeder

*Tel. 031-667 1081 ext.2936
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Electronic mail:
d.c.heggie@uk.ac.edinburgh*

*University of Edinburgh,
Dept. of Mathematics,
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U.K.*

1987 July 7

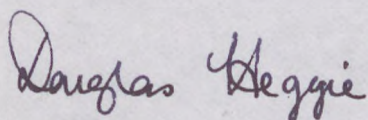
Dr B. Szeidl,
Konkoly Observatory,
Box 67,
H-1525 Budapest,
Hungary.

Dear Dr Szeidl,

Further to my letter of July 1, I have now been in touch with Bob Dickens. I am glad to say that he agreed to represent the interests of your Commission in the organisation of a joint commission meeting on HB morphology, etc., especially if his role could be an advisory one, since he is already involved in the active organisation of another meeting at about the time of the Baltimore General Assembly. This is fine.

He asked me to let you know about this, presumably by way of reply to the letter you wrote him some time ago.

With best wishes,
Yours sincerely,

A handwritten signature in dark ink, reading "Douglas Heggie". The signature is written in a cursive, flowing style.

D.C. Heggie
President, IAU Commission 37

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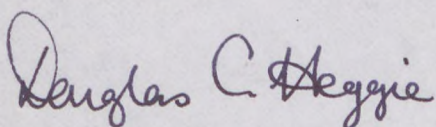
1987 July 1

Dr B. Szeidl,
Konkoly Observatory,
Box 67,
H-1525 Budapest,
Hungary.

Dear Dr Szeidl,

Many thanks for your telex. I am delighted that Commission 27 would be interested in joining Commission 37 for a discussion at Baltimore in 1988 on globular cluster horizontal branch morphology, RR Lyrae variables, etc. Actually some members of my Organising Committee expressed doubt as to whether this would stretch to a full day session, or would compete successfully against other, broader scientific topics. Therefore I have not made a proposal to the IAU for a Joint Discussion, but I very much hope that such a session or sessions will form a joint commission activity at Baltimore. Then the preparation of the session is not quite so urgent. Nevertheless I shall write direct to Dr Dickens and check that he would be able to represent the interests of your commission in the preparation of such a session.

With best wishes,
Yours sincerely,



D.C. Heggie
President, IAU Commission 37

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1987 May 7

Dr B. Szeidl,
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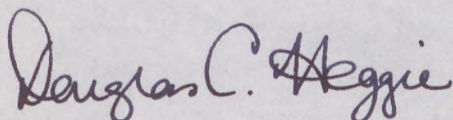
Dear Dr Szeidl,

As president of IAU Commission 37, I recently received a suggestion for a joint discussion or joint commission meeting at the forthcoming IAU General Assembly in Baltimore. It came from Dr Pierre Demarque, and concerns

"globular cluster horizontal branch morphology, RR Lyrae variables and the globular cluster system, with ramifications in stellar structure, galaxy formation and the ages of globular clusters".

I am wondering whether your Commission (Variable Stars, no.27) would be interested in participating in such a session, and I would be very interested in hearing your reaction to this. If you think that Commission 27 would indeed be interested, can you suggest a member of your Commission who might represent the interests of your Commission in the organisation of such a session?

With best wishes,
Yours sincerely,



D.C. Heggie
President, IAU Commission 37 (Star Clusters and Associations)

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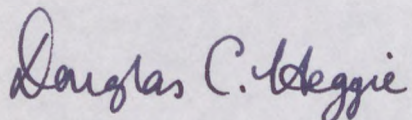
1987 December 22

Dr B. Szeidl,
Kinkoly Observatory,
Box 67,
H-1525 Budapest,
Hungary

Dear Dr Szeidl,

Late last June you kindly offered the support of IAU Commission 27 for a proposal from my Commission for a session at Baltimore devoted to globular cluster horizontal branch morphology, RR Lyrae stars, and related topics. However, I regret to tell you that we have had to drop this proposal from our list of activities at Baltimore. I am also sending a message to Dr R.J. Dickens about this, since you had suggested that he might act as a consultant for Commission 27 in the proposed joint meeting.

Yours sincerely,



D.C. Heggie
President, IAU Commission 37