

## **School of Graduate Studies**

## University of Toronto

March 21, 2002

Professor Carolyn Tuohy Vice-President, Policy Development and Associate Provost Room 206, Simcoe Hall 27 King's College Circle University of Toronto MAR 2 2 2002

VP (POLICY DEVT) & ASSOCIATE PROVOST

Dear Professor Tuohy,

At its meeting of March 19, 2002, the Council of the School of Graduate Studies approved the following motion to change admission requirements:

**MOTION** ( / ) **THAT** SGS Council approve as amended, the proposal of the Department of Astronomy and Astrophysics, for Direct Admission effective September 2002, to the Ph.D. Program as follows:

- 1) Candidates are immediately engaged in original research through two required sequential research courses, AST 1501Y and AST 1500Y, with different supervisors. An oral exam by committee is held for each.
- 2) Candidates follow an approved program of study including the research courses AST 1500Y, AST 1501 Y and the research course AST400\*Y (in sequence of the last digit: 2, 3, etc) and a minimum of four half-courses, at least two of which are from among the AST Elective or Specialized Courses, subject to the approval of the instructor, the candidate's Ph.D. program committee and the Department.

The motion sheet and cover letter are attached. These changes will appear in the 2002-2003 edition of the SGS Calendar.

On behalf of the Council of the School of Graduate Studies, I am presenting this item to you for approval by Governing Council committees as appropriate.

Yours sincerely,

Jane Alderdice

Secretary to SGS Council

And Coordinator of Policy, Program and Liaison

Enc.

c.c.

J. Astington

R. Branch

W. Clarke

D. Coombs

D. Cormack

R. Desai

B. Katz

C. Johnston

S. Moore

L. Yee

smr/H:Council/FollowUp/2001-2002/Mar 1/Astronomy Astrophysics Direct Admission.doc

## Motion

as amended and approved by the

# School of Graduate Studies Council Tuesday, March 19, 2002

Item 6.

## 6.2: Astronomy and Astrophysics

**MOTION** ( / ) **THAT** SGS Council approve the proposal of the Department of Astronomy and Astrophysics, for Direct Admission effective September 2002, to the Ph.D. Program as follows:

- 1) Candidates are immediately engaged in original research through two required sequential research courses, AST 1501Y and AST 1500Y, with different supervisors. An oral exam by committee is held for each.
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See proposed Calendar entry attached.

#### **NOTE:**

This proposal was approved at Division III Executive Committee at its meeting of November 6, 2002.

With SGS Council approval, this item will go to Governing Council committees for approval and to the Ontario Council on Graduate Studies for information.

## **Department of Astronomy and Astrophysics**



## Faculty of Arts and Science

## **University of Toronto**

UNIVERSITY OF TORONTO 60 SAINT GEORGE STREET TORONTO, ONTARIO

TEL. (416) 978-3150 FAX (416) 971-2026 chair@astro.utoronto.ca

March 12, 2002

Associate Dean Rashmi Desai, School of Graduate Studies 65 St. George Street Toronto

Dear Dean Desai,

I am writing to submit for approval of SGS Council the calendar entry related to the proposed offering of Direct Entry into a PhD program in the Department of Astronomy and Astrophysics. As you know, this proposal has been approved by the Executive Committee of Division III at its November 6, 2001 meeting.

I enclose a copy of the motion as approved. It includes the calendar entry as revised.

With best wishes,

Sincerely,

W. H. Clarke Acting Chair

## Division III Executive Committee Meeting, November 6, 2001

## Astronomy and Astrophysics Direct-Entry to the Ph.D. Program

**MOTION** (duly moved and seconded) **THAT** the 2001-2002 Executive Committee of Division III approve the proposed calendar entry describing M.Sc. and Ph.D. programs, including direct-entry admission to the Ph.D. program, in the Department of Astronomy and Astrophysics. The calendar entry reads as follows:

## Degree of Doctor of Philosophy

#### Admission Requirements

[Unchanged from the current calendar listing for the degree of Master of Science, but reproduced here for the convenience of the Executive.]

- 1. Candidates are accepted under the general regulations of the School of Graduate Studies. Applicants who were educated outside Canada should pay particular attention to the English language competency requirements.
- 2. Because many universities do not offer extensive undergraduate training in astronomy and astrophysics, preparation in physics and mathematics is an acceptable background for candidates.
- 3. Candidates are strongly advised to take the verbal, quantitative, and advanced physics tests of the Graduate Record Examination administered by the Educational Testing Service, Princeton.

#### Program Requirements

- 1. The program for the degree is intended to be completed in five years (15 semesters) Candidates are normally expected to be on campus full time for the duration of their program.
- 2. Candidates are immediately engaged in original research through two required research courses, AST 1501Y and AST 1500Y, with different supervisors. An oral exam by committee is held for each.

Schedule: AST 1501Y is normally completed during the fall/winter of the first year, and AST 1500Y is completed in the following summer.

3. The core of the program is a thesis embodying the results of original research which must be submitted for appraisal in accordance with the regulations of the School of Graduate Studies.

As a first step, a candidate is required to prepare a written Ph.D. thesis proposal (possibly on a theme growing out of one of the first two research courses, but not necessarily) and defend it in an oral examination conducted by a panel of faculty members.

The intention of this "qualifying examination" is to assess the candidate's ability and readiness to carry forward and complete successfully independent Ph.D.-level research. This assessment is based on the candidate's graduate record to date, including graduate lecture courses and research performed, together with the presentation and defense of the proposed Ph.D. thesis.

Schedule: The qualifying examination is taken after four and within five semesters of beginning the program. Candidates register each year, beginning in the second year, in the research course AST 400\*Y (in sequence of the last digit: 2, 3, ...).

4. Candidates follow an approved program of study including a minimum of four half-courses, in addition to the research courses AST 1500Y, AST 1501Y and the AST 400\*Y course listed above, at least two of which are from among the AST Elective or Specialized Courses, subject to the approval of the instructor, the candidate's program committee and the Department. More courses may be taken for credit or audited as appropriate. Schedule: The required half-courses are normally taken on average one per semester in the fall/winter semesters during the first two years of the program

5. Candidates are expected to participate in the Department's weekly seminar series and to attend astronomy and astrophysics seminars and colloquia arranged by the Department, CITA, and Physics.

#### Degree of Master of Science

Admission requirements for the M.Sc. Degree are the same as those for the Ph.D. (see above). Program requirements for the M.Sc. degree are set out in items 2, 4, and 5 (above).

School Candidates in the Ph.D. program who have successfully completed those requirements, and who wish to terminate their studies at that point, may request consideration for award of the M.Sc. degree.

#### Collaborative Program in Astrophysics

The Departments of Astronomy and Astrophysics, Physics, and CITA cooperate to offer a Master of Science program in astrophysics. For details, consult the Astrophysics (Collaborative Program) entry in this calendar.

The motion **CARRIED**.

Deleted / amendment

amendmen to motion by