

FOR INFORMATION:

TO: Planning and Budget Committee

SPONSOR: Gail Milgrom, Acting Assistant Vice-President Campus and Facilities Planning

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DATE: September 13, 2011 for September 21, 2011

AGENDA ITEM: 12

Revision to the Project Planning Committee for the Department of Astronomy and Astrophysics, Canadian Institute for Theoretical Astrophysics and the Dunlap Institute for Astronomy and Astrophysics to include the Department of Mathematics and the Department of Statistics

JURISDICTIONAL INFORMATION:

Under the Policy on Capital Planning and Capital Projects, section 5.A. the membership and terms of reference of Project Committees shall be reported to the Planning and Budget Committee.

BACKGROUND:

The University of Toronto's astrophysics interest comprises three units: the Department of Astronomy & Astrophysics (DAA), the Canadian Institute for Theoretical Astrophysics (CITA), and the newly relocated Dunlap Institute for Astronomy & Astrophysics (DI). The Dunlap Institute joins the DAA and CITA at the St. George campus to form a world-class triumvirate that spans all aspects of astronomical research, teaching, and outreach.

The synergy between the DAA and CITA has enabled their success, as the interplay between theory and observation continues to be central to all aspects of astronomy and astrophysics. The inevitable consequence of this success is that the DAA and CITA have outgrown their original home in the McLennan Physical Laboratories. The DAA now occupies the Astronomy and Astrophysics Building at 50 St George Street and DI must now fit into this occupied space. The DI is undergoing a phase of extensive growth that will further fragment the astrophysics programs on campus if finding a joint home for the DAA, CITA and DI is not addressed immediately.

Accommodating the three cognate units within the same facility and in new modern laboratories will maximize the interactions of researchers, educators, and students in these units, recapturing the current missed opportunities for collaborations, synergy, and intellectual exchanges.

The Department of Mathematics plays a central role in the teaching and research mission of the University. While building on its existing research leadership in pure mathematics, the Department is developing several initiatives to increase its presence in applied mathematics by fostering collaboration and partnership with cognate units in the University. An obstacle to the Department realizing its full potential is the fact that

it is currently scattered in five locations. Bringing the entire Department under one roof will facilitate better interaction between faculty, between faculty and students, and between students themselves. By locating the Department of Statistics in the same building, new synergies such as the proposed "Centre for Applied Mathematics and Statistics" come one step closer to realization.

The Project Planning Committee will make recommendations for a new facility that will co-locate the three programs to 50 St. George Street.

PROPOSED COMMITTEE MEMBERSHIP:

Howard Yee, Professor, Chair, Department of Astronomy and Astrophysics Norman Murray, Professor, Director, Canadian Institute for Theoretical Astrophysics James Graham, Professor, Director, Dunlap Institute for Astronomy and Astrophysics Kumar Murty, Professor, Chair, Department of Math James Stafford, Professor, Chair, Department of Statistics Adrienne De Francesco (Chair), Assistant Dean and Director, Office of Infrastructure Planning, Faculty of Arts and Science Eve Lee, Undergraduate student representative Mubdi Rahman, Graduate student representative Steve Bailey, Director, Office of Space Management Julian Binks, Director, Planning & Estimating, Capital Projects Bruce Dodds, Director, Utilities & Building Operations, Facilities & Services Alan Webb, Planning Officer, Campus & Facilities Planning

TERMS OF REFERENCE

- 1. Make recommendations for a detailed space program and functional plan that will co-locate the Department of Astronomy & Astrophysics, the Canadian Institute for Theoretical Astrophysics, the Dunlap Institute for Astronomy & Astrophysics and the Departments of Mathematics and Statistics in new facilities at 50 St. George Street.
- 2. Demonstrate that the proposed space program will take into account the Council of Ontario Universities' (COU) space standards and University's own best practice guidelines for research space.
- 3. Determine the secondary effects of the project, including any necessary space reallocation, and the impact on the delivery of academic programs and activities in the building during construction.
- 4. Review the capacity of existing site services and infrastructure at 50 St. George Street and determine the extent of upgrades, if required.
- 5. Identify all existing equipment and moveable furnishings to be relocated and reused, and new equipment and moveable furnishings necessary to the project and their related costs.
- 6. Identify all data and communications requirements and their related costs.
- 7. Identify a phasing plan and implementation plan for the project, if required.
- 8. Identify all security and occupational health and safety requirements and their related costs.

- 9. Determine a total project cost (TPC) estimate for the capital project, including costs associated with secondary effects.
- 10. Identify all sources of funding for the capital project and increased operating costs once the project is complete.
- 11. Report by October 2011