

# FY 2008 Technology Fee Proposal

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Submitting Organization:

Major Unit: *College of Arts and Sciences*

Department: *Department of Physics and Astronomy*

Contact Person: *Charles Windsor*

E-Mail: *cwindsor@gsu.edu*

Telephone: *1-2279*

## 1. Project Short Title

<i>5-8 Word Project Title</i>
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<i>Gaussian License for Computer Labs</i>
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## 2. Total Requested

Fiscal Year 2008
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\$ 1,500
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## 3. Executive Summary

<b>Project Description (three or four sentences)</b>
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<i>This proposal is for the purchase of the <b>Upgrade from G03W Serial License to Site License for multiprocessor systems</b> (windows). This license upgrade is for computers in our Bio-physics lab, 160 NSC.</i>
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## 4. Project Description

*Our goal is to enable graduate and undergraduate students using this lab to prepare work that will be submitted for processing on various computer clusters throughout the University (example, the 28-node dual-core Biocluster or the new IBM P5 575 cluster – URSA). Preparation of these jobs, using licensed software installed on these workstations, as well as analysis of results of the calculations and report writing will also be undertaken on these workstations. This lab will promote the use of the University super computing resources and clusters as well as provide access to software specific to the needs of students in theoretical physics and bio-physics.*

## 5. Record the review numbers assigned by IS&T and Facilities. Their assessments must be included in Sections 16 and 17.

IS&T: <b>IST08-025</b>
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Facilities: <b>14514-07</b>
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## 6. Relevance to Regents Guidelines

*This request is made under Regents Guidelines items 1 and 2*

#### 7. Relevance to Strategic Plan(s)

*This lab will promote the use of the University super computing resources and clusters as well as provide access to software specific to the needs of students in theoretical physics and bio-physics.*

#### 8. Impact on Students Served

*This lab will be accessible to graduate and undergraduate students studying theoretical physics and bio-physics. The lab will be accessible 24 hours per day, 7 days per week except when the University is closed.*

### 9. Justification of Funding Requirements for Fiscal Year 2008

Provide a specific description of the funding requirements for FY 2008 in the Microsoft Excel spreadsheet below. You must use the same terminology as in the Project Description (page 2, #4) to allow each itemized line to be traced back to the items and functionality appearing in the Project Description. Failure to do so will negatively affect consideration of your proposal. Itemize and total the following categories of expense. If necessary, add lines to the table below corresponding to accounting objects of expense.

**Please note that any equipment items less than \$4,999 should be categorized as "supplies."**

Object of Expense	Itemized Descriptions	Quantity	Per unit price	Extended Total
<b>Supplies</b> (Note: PCs under \$5,000 go here. Also, use standard dollar amounts and replacement thresholds from sections 11/12, or provide explanation in sections 11/12.)	Item 1			\$0.00
	Item 2			
	Item 3			
	Item 4			
	Item 5			
	Item 6			
	Item 7			
<b>Equipment</b>	Item 1			\$0.00
	Item 2, etc			
<b>Software</b> (Note: Include Vendor and Product Name.)	Gaussian 03W multiprocessor site license,	1	\$1,500.00	\$1,500.00
	Item 2			
	Item 3, etc			
<b>Maintenance or Contractual Services</b>	Item 1			\$0.00
	Item 2, etc			
<b>Board of Regents Guidelines state "In almost no cases should technology fee revenues be used for ... space renovation, or other items or activities that do not have a direct and immediate impact upon students instructional objectives." (See Attachment 1, #8)</b>				
<b>Construction Services</b> (Requires review of Planning & Facilities)	Item 1			\$0.00
	Item 2			
	Item 3, etc			
<b>Network Connections and Infrastructure Costs</b> (Requires review of UCCS)	Item 1			\$0.00
	Item 2			
	Item 3			
	Item 4, etc			
<b>Physical Security</b> (Note: Costs normally should not exceed 2.5% of Total Requested.)	Item 1			\$0.00
	Item 2			
	Item 3			
	Item 4, etc			
<b>Other Expenses</b> (explain)	Item 1			\$0.00
	Item 2, etc			
<b>Board of Regents Guidelines state "Technology fee revenues may be used - with caution - for new staffing that is either temporary or ongoing." (See Attachment 1, #6)</b>				
<b>Staff Salaries</b>	Item 1			\$0.00
	Item 2, etc			
<b>Fringe Benefits</b>	Item 1			\$0.00
	Item 2, etc			
		<b>Hours/wk</b>	<b>Hourly Rate</b>	
<b>Student Assistant Salaries</b>	Item 1			\$0.00
	Item 2, etc			
<b>Graduate Student Assistant Salaries</b>	Item 1			\$0.00
	Item 2, etc			
<b>TOTAL</b>				<b>\$1,500.00</b>

### 10. Consequences of Partial Funding

State what the consequences would be on the effectiveness and viability of the proposal if it were only funded in FY 2008 at the following percentages of the requested total:

**Only 75% funded:** State specifically whether or not the proposed project would remain viable. If the project would remain viable, itemize and total the following categories of expense at 75% funding in the Microsoft Excel spreadsheet below.

<b>Supplies</b> (Note: PCs under \$5,000 go here. Also, use standard dollar amounts and replacement thresholds from sections 11/12, or provide explanation in sections 11/12.)	Item 1					\$0.00
	Item 2					
	Item 3					
	Item 4					
	Item 5					
	Item 6					
	Item 7					
<b>Equipment</b>	Item 1					\$0.00
	Item 2, etc					
<b>Software</b> (Note: Include Vendor and Product Name.)	Item 1					\$0.00
	Item 2					
	Item 3, etc					
<b>Maintenance or Contractual Services</b>	Item 1					\$0.00
	Item 2, etc					
<b>Board of Regents Guidelines state "In almost no cases should technology fee revenues be used for ... space renovation, or other items or activities that do not have a direct and immediate impact upon students instructional objectives." (See Attachment 1, #8)</b>						
<b>Construction Services</b> (Requires review of Planning & Facilities)	Item 1					\$0.00
	Item 2					
	Item 3, etc					
<b>Network Connections and Infrastructure Costs</b> (Requires review of UCCS)	Item 1					\$0.00
	Item 2					
	Item 3					
	Item 4, etc					
<b>Physical Security</b> (Note: Costs normally should not exceed 2.5% of Total Requested.)	Item 1					\$0.00
	Item 2					
	Item 3					
	Item 4, etc					
<b>Other Expenses</b> (explain)	Item 1					\$0.00
	Item 2, etc					
<b>Board of Regents Guidelines state "Technology fee revenues may be used - with caution - for new staffing that is either temporary or ongoing." (See Attachment 1, #6)</b>						
<b>Staff Salaries</b>	Item 1					\$0.00
	Item 2, etc					
<b>Fringe Benefits</b>	Item 1					\$0.00
	Item 2, etc					
			<b>Hours/wk</b>		<b>Hourly Rate</b>	
<b>Student Assistant Salaries</b>	Item 1					\$0.00
	Item 2, etc					
<b>Graduate Student Assistant Salaries</b>	Item 1					\$0.00
	Item 2, etc					
<b>TOTAL</b>						<b>\$0.00</b>

**Only 50% funded:** State specifically whether or not the proposed project would remain viable. If the project would remain viable, itemize and total the following categories of expense at 50% funding in the Microsoft Excel spreadsheet below.

Object of Expense	Itemized Descriptions		Quantity	Per unit price	Extended Total
<b>Supplies</b> (Note: PCs under \$5,000 go here. Also, use standard dollar amounts and replacement thresholds from sections 11/12, or provide explanation in sections 11/12.)	Item 1				\$0.00
	Item 2				
	Item 3				
	Item 4				
	Item 5				
	Item 6				
	Item 7				
<b>Equipment</b>	Item 1				\$0.00
	Item 2, etc				
<b>Software</b> (Note: Include Vendor and Product Name.)	Item 1				\$0.00
	Item 2				
	Item 3, etc				
<b>Maintenance or Contractual Services</b>	Item 1				\$0.00
	Item 2, etc				
<b>Board of Regents Guidelines state "In almost no cases should technology fee revenues be used for ... space renovation, or other items or activities that do not have a direct and immediate impact upon students instructional objectives." (See Attachment 1, #8)</b>					
<b>Construction Services</b> (Requires review of Planning & Facilities)	Item 1				\$0.00
	Item 2				
	Item 3, etc				
<b>Network Connections and Infrastructure Costs</b> (Requires review of UCCS)	Item 1				\$0.00
	Item 2				
	Item 3				
	Item 4, etc				
<b>Standard</b> Costs normally should not exceed 2.5% of Total Requested.)	Item 1				\$0.00
	Item 2				
	Item 3				
	Item 4, etc				
<b>Other Expenses</b> (explain)	Item 1				\$0.00
	Item 2, etc				
<b>Board of Regents Guidelines state "Technology fee revenues may be used - with caution - for new staffing that is either temporary or ongoing." (See Attachment 1, #6)</b>					
<b>Staff Salaries</b>	Item 1				\$0.00
	Item 2, etc				
<b>Fringe Benefits</b>	Item 1				\$0.00
	Item 2, etc				
			<b>Hours/wk</b>	<b>Hourly Rate</b>	
<b>Student Assistant Salaries</b>	Item 1				\$0.00
	Item 2, etc				
<b>Graduate Student Assistant Salaries</b>	Item 1				\$0.00
	Item 2, etc				
<b>TOTAL</b>					<b>\$0.00</b>

11. Standard Dollar Amounts

In constructing the budgetary requests in Sections 9 and 10 above, computer workstations should be budgeted at the following levels:

N/A

12. Standard Replacement Thresholds

N/A

13. Prerequisite, Non-Technology Fee Funding

N/A

14. Matching Funds

N/A

15. Staffing and Other Support Availability

*The Department Technology Coordinator will provide software and hardware maintenance required by this lab. This staff will ensure all new equipment meets security requirements on campus as well as maintain them throughout their life cycle.*

16. Space Availability and Impact on Facilities

**For CBSAC and Planning & Facilities Use Only:**

CBSAC and Planning & Facilities Assessment of Space Availability and Impact on Facilities (this information is also transmitted to [techfee@gsu.edu](mailto:techfee@gsu.edu)):

**This project has no impact on facilities.**

## 17. Impact on Computing/Networking/Information Security Infrastructure

### **For IS&T Use Only:**

IS&T Assessment of Network/Computing/Information Security Infrastructure:

<p><u>Information Security Review (Tammy Clark):</u> Impact: No Assessment:</p> <p><u>Wireless and Network Ports Review (Mark Roberson):</u> Impact: Yes/No Assessment:</p> <p><u>Server Connections (Charles Hollingsworth, Tammy Clark, Keith Campbell):</u> Impact: No, (No-CWH), No impact - KEC  Assessment:</p> <p><u>External Connections (Charles Hollingsworth):</u> Impact: (No-CWH)  Assessment:</p> <p><u>DVR Installations (Mark Roberson, Tammy Clark, Charles Hollingsworth):</u> Impact: No (No-CWH)  Assessment:</p> <p><u>Lab and Classroom Configurations (Joe Amador):</u> Impact: Yes/No NO Assessment:</p>
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## 18. Physical Security Needs

N/A

## 19. Post-Project Assessment Criteria

*Purchase license and install on lab computers Fall Semester – 2007*

## 20. Review and Acknowledgements

Attach electronic notes or documentation showing that the following units or administrators have reviewed or acknowledged this proposal:

- Matching funds commitment from appropriate fiscal officer

## Technology Fee Guidelines

The Review Team recommends that technology fee expenditure guidelines should be based upon two fundamental principles.

- Student technology fee revenues should not be used to supplant current levels of technology fee expenditures. Institutions should provide evidence that overall institution technology expenditures clearly reflect that expenditures based upon fee revenues are above and beyond normal levels.
- The focus of the student technology fees should be on academic or instructional technology and distinctions should be drawn between expenditures for administrative applications or scientific and laboratory equipment, and instructional technology.

With respect to the second principle, technology fee revenues should be directed toward those needs that directly meet the educational value criterion established in the Chancellor's approval letters; i.e., the fees provide added value to the educational experiences of the students. We define this value to be instructionally oriented and not oriented toward other services such as housing registration, advising, record keeping, etc., important as these services are to a student's overall collegiate experiences.

The guidelines in bold print below are not prescriptive but rather are intended to help provide a framework for local institutional decisions.

**[1] Technology fee revenues should be used primarily for the direct benefit of students to assist them in meeting the educational objectives of their academic programs.** At this point in the evolution of collegiate academic technologies, access is important: access to productivity tools, discipline specific software packages, computers and printers, internal and external databases, introductory and advanced training, and access to networks (from home or from campus). Therefore, high priorities should be given to the use of technology fees for these purposes.

**[2] Technology fee revenues should be used to assure that there are sufficient campus licenses for primary productivity tools such as those found in the Microsoft Office product suites for discipline specific software.** The fees should be used to assure that students have easy access to tools and software packages that are critical within their chosen disciplines. This range from computer assisted design through music composition, art and drawing tools, scientific notation, modeling, and other discipline specific analytical tools. Appropriate computer-based or web-based instructional modules are appropriate as well.

**[3] Technology fee revenues should be used for hardware and Network related expenditures that include support of general purpose or special purpose laboratories used by students for body productivity and more discipline related activities.** Provision of adequate network bandwidth and access to the Internet and special purpose databases and specialized computing are vitally important in some disciplines and should be supported. At the same time, institutions will need to balance competing demands for greater and broader access to resources for all students versus the demand for important but specialized and restricted resources.

**[4] Technology fee revenues may be used for training of students and, to a lesser extent, staff and faculty.** Students and faculty perceive good training in the use of computing and networking resources as

an important component of effective use of electronic instructional resources both inside and outside the classroom. Consequently, the secondary educational value is high; training allows students and faculty to focus on course content rather than on the mechanics of operating a computer. In general, staff and faculty training should be supported from operational funds. Obvious exceptions include circumstances such as space remaining available in a training session after student sign-up is completed, or the purchase of a site license for online training that permits access by all members of the campus community.

**[5] Technology fee revenues may be used to leverage other funds where appropriate.** Keeping in mind the second fundamental principle, there are circumstances where a grant or other or one-time allocation could be combined with technology fee revenues to yield greater access or resources for students.

**[6] Technology fee revenues may be used--with caution--for new staffing that is either temporary or ongoing.** Institutions should continue to focus on the criterion established initially by the Chancellor's approval letter--the fees provide added value to the educational experiences of students. Where additional staffing clearly will provide added value to students--and the value can be documented--technology fee expenditures may be warranted. For example, hiring temporary trainers may be the best way to ensure that all incoming freshmen and transfers receive a thorough information technology orientation session. However, under no circumstances should technology fee revenues be used to fund existing positions that would otherwise be cut from an operational budget, nor should fees be used to fund general computing and networking positions that have a significant administrative or research support component. Institutions are encouraged to develop a formal process of review for proposed student technology fee staffing expenditures to ensure continued awareness of this guideline.

**[7] Lower priority uses of technology fee revenues include** development of software packages, acquisition of one of a kind software or hardware products for faculty use in training, and consumable supplies such as printer paper.

**[8] In almost no cases should technology fee revenues be used for administrative software** or software implementation (such as BANNER), administrative hardware, research equipment, non-networkable specialized scientific equipment, space renovation, or other items or activities that do not have a direct and immediate impact upon students instructional objectives.

## GEORGIA STATE UNIVERSITY Student Technology Fee FY 2008

- *The following desktop systems are the standard technology for Student Technology Fee purposes. Desktop systems exceeding this capability and price must be specifically justified.*

Windows/Intel “Standard” PC Configuration (Dell has been used as the vendor, but the standard is not vendor specific)

Computer Name	OptiPlex GX520 Minitower or Desktop
Processor Speed	Pentium® 4 Processor
Memory	1GB DDR2, Non-ECC SDRAM, 400MHz, 2 DIMMs
Video	Integrated Intel® Graphics Media Accelerator 950 224MB
Hard Drive	80GB SATA, 7200RPM hard drive
Mouse	Dell USB 2-Button Entry Mouse with Scroll
Network Card	Integrated Broadcom® Gigabit NIC
Sound	Integrated AC97 Audio Card with Dell A215 Speakers
Removable Media Storage Devices	16X DVD+/-RW with Sonic Digital Media and Cyberlink Power DVD
Monitor	Dell 17” UltraSharp 1704FPT Flat Panel VGA/DVI
Keyboard	Dell USB Keyboard, No Hot Keys
Operating System	Windows® XP Professional, SP2
Hardware Support Services	4Year Limited Warranty plus 4 Year NBD On-site Service

Macintosh “Standard” Configuration

Computer Name	iMac
Processor Speed	2.0 GHz Intel Core 2 Duo
Memory	2GB 667 DDR2 SDRAM – 2x1GB
Video	ATI Radeon X 1600128 MB DDR SDRAM
Hard Drive	160GB Serial ATA drive
Network Card	Gigabit Ethernet built in
Wireless	Built in: AirPort Extreme (802.11b/g, 54 Mbps); Bluetooth; & iSight Video Camera
Operating System	Mac OS X version 10.4 Tiger
Removable Media Storage Devices	Super Drive (DVD-RW/CD-RW)
Monitor	17-inch (viewable) widescreen TFT active-matrix LCD
Hardware Support Services	3 Year Apple Protection Plan (AppleCare) – Tech Support and Warranty

- *The following types of equipment require justification over and above desktop systems. The following prices and configurations are standard for these types of equipment. Any deviation from these standards must be further justified.*

Windows/Intel “Standard” Laptop Configuration (Dell™ has been used as the vendor, but the standard is not vendor specific)

Computer Name	Latitude D510
Processor Speed	Pentium® M Processor 740 (1.73GHz)
Memory	1.0GB DDR2 533 MHz SDRAM 2 DIMMs
Video	Mobile Intel® 915GM graphics
Hard Drive	80GB Hard Drive, 9.5MM, 5400RPM
Floppy Drive	Floppy Disk Drive
Network Card	Gigabit Ethernet LAN
Module Bay Devices	8X DVD+/-RW w/Sonic Digital Media and Cyberlink PowerDVD
Monitor	15.0" XGA active matrix (TFT)
Modem	Internal 56K modem
Operating System	Windows® XP Professional, SP2
Wireless	Intel® PRO/Wireless 2200 WLAN (802.11b/g)
Carrying Case	None
Battery	6 Cell Primary Battery
Hardware Support Services	4Year Limited Warranty plus 4Year NBD On-site Service

Macintosh “Standard” Laptop Configuration

Computer Name	MacBook
Processor Speed	2.0 GHz Intel Core 2 Duo
Memory	1GB 667 DDR2 SDRAM – 2x512
Video	Intel GMA 950 64 MB Shared Memory
Hard Drive	80GB Serial ATA drive
Network Card	Gigabit Ethernet Built in
Removable Media Storage Devices	4 X Super Drive DVD-RW/CD-RW
Monitor	13" Glossy Widescreen
Operating System	Mac OS X version 10.4 Tiger
Wireless	Built in: AirPort Extreme (802.11b/g, 54 Mbps); Bluetooth; and iSight Video Camera
Battery	Removable Battery
Hardware Support Services	3 Year Apple Protection Plan (AppleCare) – Tech Support and Warranty

“Standard” Tablet Configuration

Computer Name	Gateway® M275Eb
Processor Speed	Pentium® M Processor 755 (2GHz, 400MHz FSB)
Memory	1024MB DDR SDRAM (2-512MB modules)
Video	Integrated Intel® Extreme Graphics 2
Hard Drive	80GB 5400rpm Ultra ATA hard drive
Floppy Drive	Integrated 4-in-1 Memory Card Reader
Keyboard and Mouse	Full-sized Keyboard and EZ Pad® Pointing Device
Digitizer Pens	Digitizer Pen for M275
Network Card	Integrated 10/100 Ethernet
Optical Drive	Integrated 24x/10x/24x CDRW and 8x DVD Combo
Monitor	14.1" XGA TFT Active Matrix with Rotating Hinge
Modem	Integrated V.92 56K Modem
Operating System	Windows® XP Tablet PC Edition
Wireless	Integrated 802.11b/g Wireless Networking Card
Carrying Case	None
Battery	Primary 8-cell Lithium Ion Battery with AC Pack and 1 year limited battery warranty
Hardware Support Services	Notebook Value Service Plan – 4 year part/labor/no on-site/4 year technical support; 36-month limited hinge warranty

“Standard” PDA Configuration

Computer Name	Dell™ Axim™ X50
Processor Speed	Intel® XScale™ PXA270 Processor 520MHz
Memory	64MB SDRAM and 128MB Intel StrataFlash® ROM
Slots	Integrated CompactFlash Type II and Secure Digital, MMC card slots
Monitor (Display)	3.5" color TFT display
Cable	USB Cradle including Battery Changing Slot
Operating System	Windows® Mobile 2003 Second Edition
Wireless	Integrated 802.11b and Bluetooth™ wireless technologies
Carrying Case	None
Battery	Removable primary battery
Hardware Support Services	Advance Exchange Service – 3-year limited warranty



**GEORGIA STATE UNIVERSITY  
Student Technology Fee FY 2008  
Equipment Replacement Exception Form**

**Unit:** Department of Physics and Astronomy

**Proposal Submitter:** Charles Windsor

**Proposal/Award Title:** Gaussian License for Computer Labs

*This proposal is using the university minimum performance criteria.*

**PROJECT REPORT**

**FY 2008 Student Technology Fee Award**

**A. Award Identification**

**Award Number:** \_\_\_\_\_

**Short Title:** \_\_\_\_\_

**Major Unit:** \_\_\_\_\_

**Department:** \_\_\_\_\_

**Contact Person:** \_\_\_\_\_

**Amount Awarded:** \_\_\_\_\_

**Amount Expended:** \_\_\_\_\_

**B. Project Assessment**

*Include below the milestones or project outcomes as identified in the FY 2008 Student Technology Fee Proposal Submission, Section 18.*

*Report on the status ("Complete" or "In Progress") of each item and provide specific information (url, announcement, etc.) to support the evaluation. Include specific dates where appropriate.*