

April 28, 2008

[The following letter was sent to all admitted students majoring in physics within the Department of Biological, Chemical & Physical Sciences.]

Congratulations on your admission to IIT for the 2008-2009 academic year! As a professor of physics and an academic advisor, I would like to take this opportunity to welcome you to our program. Our active, research-based department is small enough that students can really get to know the faculty while obtaining an excellent education. In addition, our strong connections with the biology and chemistry divisions provide many interdisciplinary opportunities, something that sets us apart from traditional physics departments.

One of the courses that you will take in your first semester at IIT will be Introduction to the Profession — a course that will give you a glimpse into what a physicist really does and an opportunity to get to know your fellow freshman physics majors. Last fall, the students learned about the tools they will need to use as physicists, and we built a pumpkin trebuchet! That's us in the orange shirts in the foreground toward the end of the following video clip: <http://video.yahoo.com/watch/1483472/5061205>. I will be teaching this course again in Fall 2008 and who knows what we'll build. I am sure that you will also want to get involved with the local Society of Physics Students chapter. Their activities include astrophotography sessions (<http://astrowiki.phys.iit.edu/astrowiki/>) and talks by physics faculty regarding their research.

Many of our physics majors become involved in research. This year, I have been working on a publication with two undergraduate students who have been studying the local structure around erbium atoms in silica glass using the Advanced Photon Source, which is 25 miles away from the IIT campus. This material has potential applications in the laser communications field and it is important to thoroughly understand how its structure affects its function. Other physics majors will be working with my colleagues on neutrino oscillations and superconducting materials. They have presented their work at the departmental poster session in March and at the 2008 Chicago Area Research Symposium (<http://www.caurs.com/>), which was held at IIT on April 26.

The small class size of our advanced physics courses will ensure that you forge lasting relationships with your classmates and our faculty. It always gives me great pleasure to be able to follow the progress of my advisees after they graduate and pursue successful careers in research, education, law, business, and industry.

If you have any questions about the physics program, please don't hesitate to email me.

Sincerely,

Carlo U. Segre
Professor of Physics
Voice: 312.567.3498
segre@iit.edu
<http://www.iit.edu/~segre/>