

## Department of Physics & Astronomy

### PHYSICS NEWS FLASH

## UT 's Murat Özer Wins Nottingham Prize

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*Murat Özer*

Physics Graduate Student Murat Özer has claimed some pretty big honors lately, in large part because of the precise attention he gives to systems that are incredibly small. His most recent award is the prestigious Nottingham Prize, which he won at the [Physical Electronics Conference](#), held June 18-21 at Princeton University. The award was split between Özer and Paul Snijders of the Kavli Institute of Nanoscience Delft (The Netherlands). Both are students of UT Physics Professor Hanno

Weitering.

The prize is the latest in a series of honors Özer has earned this year. In April he won both a University Chancellor's Citation for Professional Promise and a Paul H. Stelson Research Fellowship from the physics department. He was first author on a paper in the [March 2006 issue of \*Nature Physics\*](#) showing that films only a few atom layers thick can carry enormous supercurrents—defying theories that superconductivity is typically weak at the nanoscale. The potential for electronic currents flowing through atomic-scale components with no resistance opens a whole new realm of prospects. Imagine, for example, ultra-fast quantum computers that could process data and perform calculations at speeds far faster than anything currently possible.

"Özer has been driven—unstoppable—in stellar research at the convergence of several subfields of physics and is bringing excellent recognition to the department, the college, and the university," said Physics Professor Jim Thompson, who has been a co-advisor on Özer's work.

The Nottingham Prize is named in honor of the late Wayne B. Nottingham of the Massachusetts Institute of Technology. The award, which includes a certificate and a \$1000 prize, recognizes the best paper, based on a Ph.D. thesis, given by a student at the Physical Electronics Conference. This annual meeting is devoted to new research

results in the physics and chemistry of surfaces and interfaces, with emphasis on the fundamental science in materials systems including metal, semiconductors, insulators, and biomaterials.

Among previous winners with UT connections are John Pierce (Ph.D., 2003) and Joseph Carpinelli (1996), who did doctoral research at UT. Both were students of Distinguished Professor Ward Plummer, who won the prize in 1968 when he was a graduate student at Cornell. (Weitering was also an advisor to Carpinelli.) Özer and Snijders are a welcome addition to those ranks.

"I am extremely proud of both students with this clean sweep of the Nottingham awards," Weitering said.