Department of Mathematical Sciences
Colloquium

Patrick Morandi

Chair, Department of Mathematical Sciences, NMSU

FROM FERMAT'S LAST THEOREM TO THE NOTION OF AN IDEAL OF A RING

Fermat's Last Theorem states that the equation $x^n + y^n = z^n$ has no positive integer solutions for $n \geq 3$. Fermat, who stated it in the margin of a book, never provided a proof. Many people attempted to prove it, and some important ideas were developed through these attempts. In this talk, we will discuss some incorrect solutions to the proof, and how they led to some of the modern notions of ring theory. In particular, they led Kummer to develop the notion of "ideal numbers", which was the predecessor of the notion of an ideal of a ring.

Friday, February 19, 2010 at 3 pm in Bell Hall 143
The University of Texas at El Paso

Refreshments will be served in front of the colloquium room,
15 minutes before the start of the colloquium.