

# University of Florida • Mathematics Department Twelfth Ramanujan\* Colloquium

by  
**Professor Kenneth A. Ribet\*\***

University of California, Berkeley

on  
*Fermat's Last Theorem*

**Date and Time:** 4:00 - 4:55pm, Monday, March 26, 2018

**Room:** 101 Little Hall

**Refreshments:** Before Colloquium in Little Hall Atrium



## OPENING REMARKS

by  
**Dean Dave Richardson (CLAS)**

**Abstract:** I will explain the statement of Fermat's Last Theorem and describe attempts to prove the theorem in the 350 years between the formulation of the theorem and its proof in the mid-1990s. The talk will focus on the modern history and will allude to some of the tools that are used in the final proof, including elliptic curves and modular forms.

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Professor Ribet will also give two additional seminar talks:

- (i) Tuesday, March 27, 9:00 – 9:50am in The Little Hall Atrium (3rd floor):

*Eisenstein congruences and the cuspidal group*

- (ii) Tuesday, March 27, 10:10 – 11:00am in The Little Hall Atrium (3rd floor):

*Multiplicity-one (and its failure) for Jacobians of modular curves*

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\* ABOUT RAMANUJAN: Srinivasa Ramanujan (1887-1920), a self-taught genius from South India, dazzled mathematicians at Cambridge University by communicating bewildering formulae in a series of letters. G. H. Hardy invited Ramanujan to work with him at Cambridge, convinced that Ramanujan was a "Newton of the East"! Ramanujan's work has had a profound and wide impact within and outside mathematics. He is considered one of the greatest mathematicians in history.

\*\* ABOUT THE SPEAKER: Kenneth Ribet is Professor of Mathematics at the University of California, Berkeley and the current President of the American Mathematical Society. He received his PhD from Harvard in 1973 under John Tate. He is best known for his proof that Fermat's Last Theorem would follow logically from the modularity conjecture for elliptic curves. This was crucial to Andrew Wiles proof of Fermat's Last Theorem in 1995. Ribet is a member of the editorial boards of numerous book series and research journals. He was elected to the American Academy of Arts and Sciences in 1997 and the US National Academy of Sciences in 2000. He was awarded the Fermat Prize in 1989 and received an honorary PhD from Brown University in 1998. He received the Brouwer medal from the Royal Dutch Mathematical Society (KWG) in 2017. He received his department's Distinguished Teaching Award in 1985 and again in 2013.

ABOUT THE SPONSOR: Evan Pugh Professor George Andrews of The Pennsylvania State University is the world's premier authority in the theory of partitions and work of the Indian mathematical genius Srinivasa Ramanujan combined. He is a Member of the National Academy of Sciences. He has close ties with the UF Mathematics Department which has one of the strongest programs on mathematics related to Ramanujan's work. He was a recipient of an Honorary Doctorate from UF in December 2002. Since 2005, he is a Distinguished Visiting Professor each year in the Spring term in the Mathematics Department. During 2008-2009 he was President of the American Mathematical Society.