



UNIVERSITY OF CALIFORNIA  
RIVERSIDE

DEPARTMENT OF MATHEMATICS

## COLLOQUIUM

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DR. COLIN MCLARTY  
CASE WESTERN RESERVE UNIVERSITY

“WHAT IS ‘ELEMENTARY’ NUMBER  
THEORY? FROM HILBERT TO GÖDEL AND  
ON TO FERMAT'S LAST THEOREM”

Hilbert had a brilliant idea about set theory and really all mathematics beyond strictly finite arithmetic. He made a mistake that only a great genius could make, and by it he created a major part of modern logic. But Gödel proved it was a mistake indeed. Some things Hilbert considered obvious about elementary arithmetic (and you might too, when you first think about them) are actually not true. This talk describes the vistas that Hilbert opened, and Gödel opened wider, and relates them to the specific topic of proofs of Fermat's Last Theorem.

WEDNESDAY, APRIL 12<sup>TH</sup>, 2017

SURGE 284

TEA TIME 3:40 P.M.

TALK BEGINS 4:10 P.M.