

A brief history of Fermat's Last Theorem

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Meeting ID: **982 9762 8831** Passcode: **831657**

The speaker will discuss work on Fermat's Last Theorem over the last 350+ years. The theorem was proved in the mid-1990s using tools from contemporary arithmetic algebraic geometry. The speaker will focus on such objects as elliptic curves, Galois representations and modular forms that are central to the proof. The constructions introduced by Wiles and Taylor–Wiles in the 1990s have been refined and generalized significantly.



KENNETH RIBET

Kenneth Ribet is Professor of Mathematics at the University of California, Berkeley. He began his graduate studies at Harvard University under the direction of John T. Tate and received his PhD in 1973. **Ribet** works in number theory and algebraic geometry. He is best known for his proof that Fermat's Last Theorem would follow logically from the modularity

conjecture, then a well-known unproved conjecture about elliptic curves. When Andrew Wiles obtained cases of this conjecture in 1995, Wiles obtained Fermat's Last Theorem as a corollary because of **Ribet**'s prior work. **Ribet** 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. **Ribet** was inducted as a Vigneron d'honneur by the Jurade de Saint Emilion in 1988. He received his department's Distinguished Teaching Award in 1985 and again in 2013. A recent President of the American Mathematical Society, **Ribet** serves now on the Council of the US National Academy of Sciences.