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Kenneth A. Ribet* (ribet@berkeley.edu), Math Department, M/C 3840, 970 Evans Hall, Berkeley, CA 94720-3840. *A 2020 view of Fermat's Last Theorem.*

Fermat's Last Theorem was formulated in the seventeenth century and proved a little over 25 years ago. I will recall the statement of the theorem and present a skeletal summary of the proof as it was viewed in 1993 or 1994. (I gave an invited hour address at the 1994 JMM in Cincinnati on this topic but concluded my address with a discussion of the "gap" that Nick Katz had identified in the proof that Andrew Wiles announced in June, 1993. The gap was repaired in late 1994 by an article that was co-authored by Richard Taylor and Andrew Wiles.)

I will describe (or at least allude to) some of the advances in this general subject that were made possible by the new techniques that were introduced in the proof: for example, the proofs of Serre's conjecture about mod p Galois representations and the Fontaine–Mazur conjecture about p -adic Galois representations should be viewed as outgrowths of the Taylor–Wiles method that was introduced in 1994.

The question is whether or not recent progress in the study of Galois representations and modular forms has streamlined or simplified the proof of Fermat's Last Theorem to a significant extent. The short answer is: maybe yes, and maybe no. For a longer answer... come to the talk. (Received June 11, 2019)