1067-11-529 Melanie Matchett Wood\* (mwood@math.stanford.edu), Stanford University, Dept of Mathematics, Building 380, Stanford, CA 94305. Do the primes behave independently?

In number fields, finite extensions of the rational numbers, rational primes such as 2,3,5 may no longer be prime—sometimes they factor in the extension. We ask the question of whether such factoring is independent for different primes. The question can be answered completely for extensions that have abelian Galois group, but the answer is more subtle than one originally expects. (Received September 08, 2010)