## NT matters (wrapping things up)

Diophantus was the premier number theorist, Thousand years thereafter Fermat got the matter's gist; Gauss, Lagrange and Euler mastered reciprocity, Kummer's ideal numbers brought him immortality...

Wake up from your slum-bers, al-ge-bra-ic-num-bers!

Monic polynomials that somehow minimise, non-uniqueness problems when you try to factorise, irreducibility and non-primality, UFD's and PID's...oh sheer insanity!

Fight all that en-cum-bers al-ge-bra-ic-num-bers!

An algebraic integer, contained in  $\mathbb{Q}$  root d, is factored into primes if  $\mathcal{O}$  sub d's a UFD. The way in which they factor just depends on  $d \mod p$ , and p is ramified or split, or else inert, you see?

We've tamed—ay, ca-ram-bas! al-ge-bra-ic-num-bas!

H.G.