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- ## Provable p-adics

  Factoring, root finding, field extensions $/ \mathbb{Q}_p$

- ## Galois groups over p-adic fields

  without computing the splitting field

- ## Wild exponent of the conductor of genus 2 curves $/ \mathbb{Q}_p$

  $p = 2$, uses 3-torsion (degree 80 poly)   [w. TD]

Work in progress

- ## Regular models of general curves / DVRs

  ↳ differentials (periods), Tamagawa numbers, local factor, tame conductor exponent; Lin's algorithm for $g = 2, p = 2$.