Computeralgebra (2013)-Aalborg Universitet
Spiseseddel 10

10. gang, torsdag d. 10. oktober, 12:30-16:15 i lokale G5-109

- 12:30-14:15 Forelæsning: Factoring polynomials over finite fields (sider 377–389).
- 14:15-16:15 Arbejde i grupper: Opgaver fra [GG]: A, B, 8.10, C, 8.4, D, E.

  Opgave A: Compute the distinct-degree decomposition of the polynomial f in exercise 14.3 in [GG] using a command in Maple or Sage.

  Opgave B: Solve Exercise 14.3 in [GG] using Maple or Sage. You do not have to implement Algorithm 14.3, but you are welcome to do it.

  Opgave C: Trace Karatsuba's algorithm for multiplying two polynomials of degree lower than 4.

  Opgave D: Write a table/list with all the elements of $\mathbb{F}_{32}$ in Sage (or Maple) where you consider the representation using a power of a primitive element and the polynomial notation.

  Opgave E: Write Algorithm 8.1 (Karatsuba) in a Computer Algebra System.

Med venlig hilsen,

Diego