Computeralgebra (2013)-Aalborg Universitet
Spiseseddel 15

15. gang, tirsdag d. 5. november, 8:15-12:00 i lokale G5-109

- 8:15-10:00 Forelæsning: Gröbner bases: Polynomial ideals. Monomial orders and multivariate division with remainder. Monomial ideals and Hilbert's basis theorem (sider 591–604).

- 10:00-12:00 Arbejde i grupper: Opgaver fra [GG]: 21.6, 21.2, A, B, 21.8, 21.7, 21.9 (only i), C.

  Opgave A: Let $R = \mathbb{F}_3[X,Y]$. Let $f = X^2Y + 2XY^2 + XY + X$, $f_1 = X + 2Y^2 + 1$, $f_2 = Y^2 + Y$. Divide f by $\{f_1, f_2\}$ considering the monomial order $<_{\text{lex}}$. Divide f by $\{f_1, f_2\}$ considering now the monomial order $<_{\text{grlex}}$.

  Opgave B: Investigate how to define monomial orders in Maple or Sage.

  Opgave C: Read examples 21.1, 21.2, 21.3.

Med venlig hilsen,

Diego