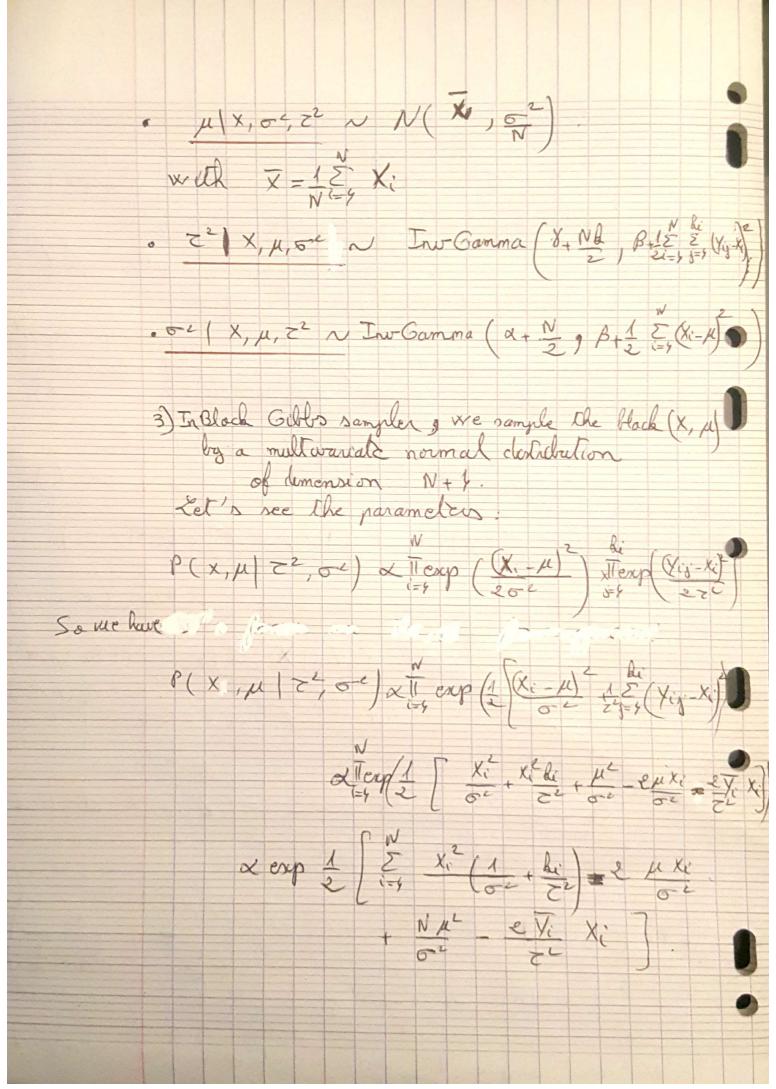
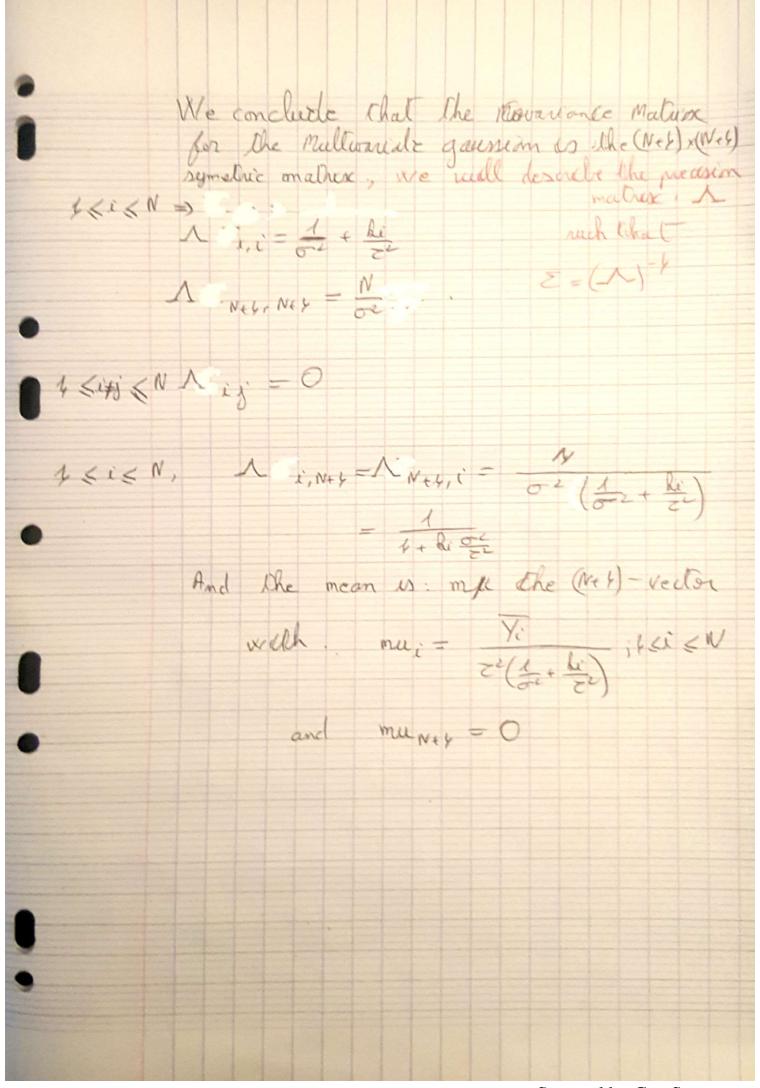


Exercise 3, Bayesian analyses of a one way random effects madel Inverse Gamma, x, s 1 exp(-6) BR+(sl) (ii) Ying = Xi + Eig (Ci) There is a typo in the handout (Ci) Eig ~ N(0, Z') white noise The prior is not informative on μ [it is degenerated uniform distriction on R]. 1) The Denrilly of the a posteriori distribution (X, 4,02, 2) is (up to a normalizing constant) P(X, M, 02, 22 | Y) & P(X | X, M, 02, 22) x P(X | M, 02) x Trovoz (4,04,22) α $\frac{1}{1}$ $\frac{1}{1}$ e) Golfs sample to update (or, Z', x, X) at a time After calculation: we obtain: We can sample the vector x at once using an integer that multivariate normal distribution.

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