

POSSIBLE TOPICS FOR THE EXAM TMA4295 7/12-2009

- Transformation of stochastic variables
- Gamma distribution
- Convergence in probability and in distribution
- Central limit theorem (CLT)
- The Jensen and Cauchy-Schwartz inequalities

- Maximum likelihood estimator (MLE)
- Consistent estimator
- Complete statistic
- Sufficient estimator, the factorization theorem
- Minimal sufficient statistics
- Rao-Blackwell's theorem
- Invariance of MLE
- UMVUE
- Asymptotic efficiency of MLE
- Hypothesis testing

The definitions, results and properties pertaining to the list above that you cannot remember, you should write down on the stamped yellow sheet.