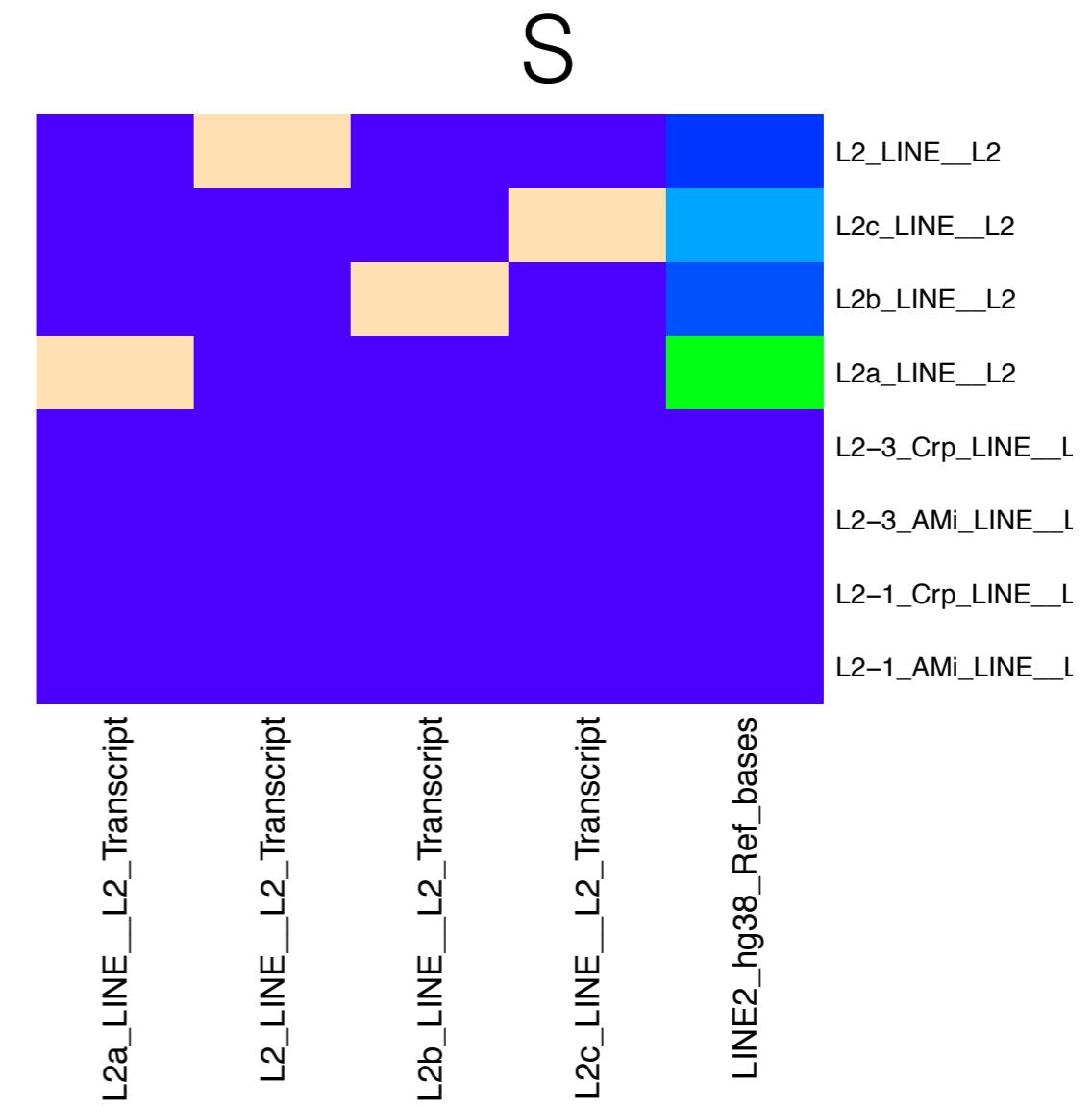
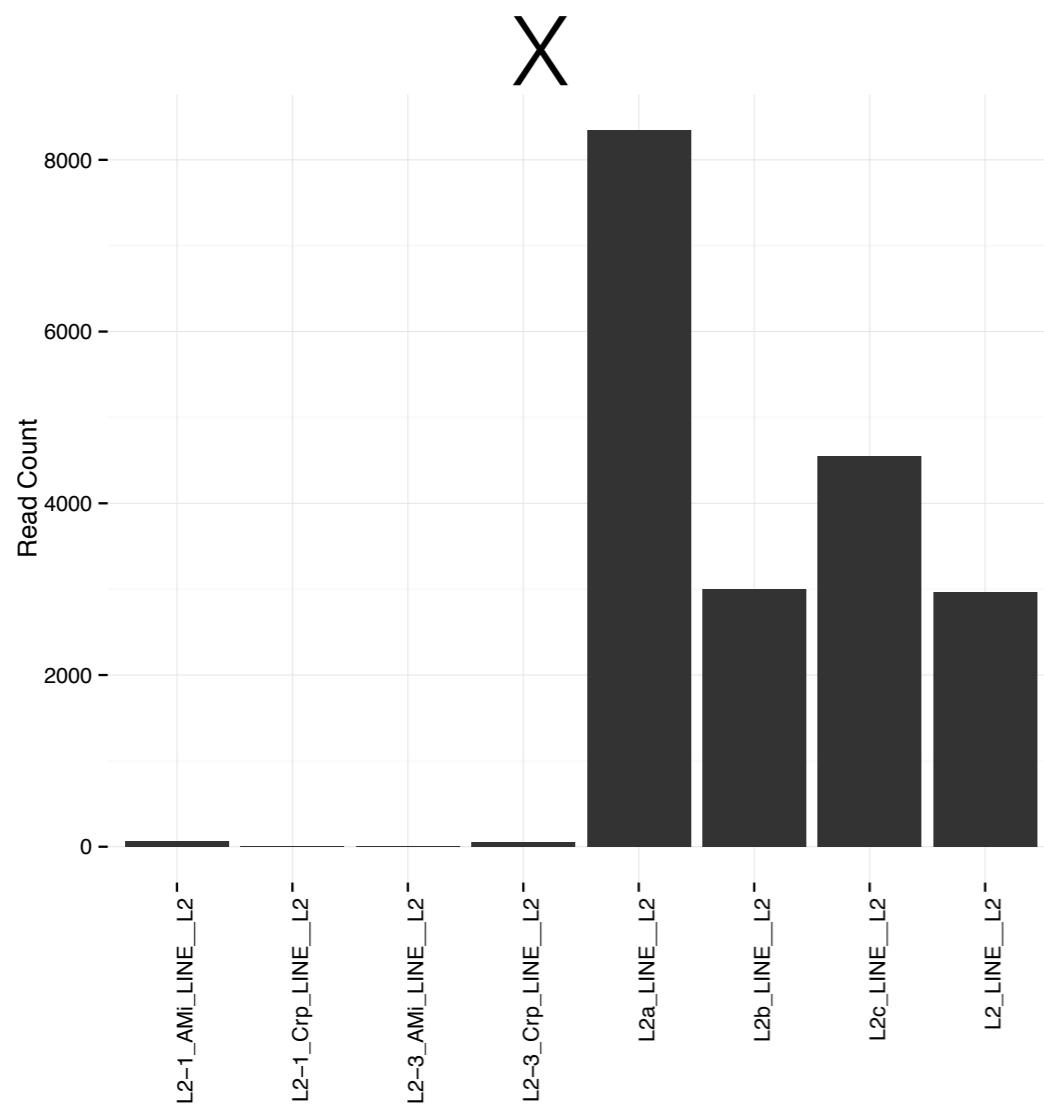


# TeXP

tech

- Evaluating deconvolution strategies to remove background transcription.



$$X = AS$$

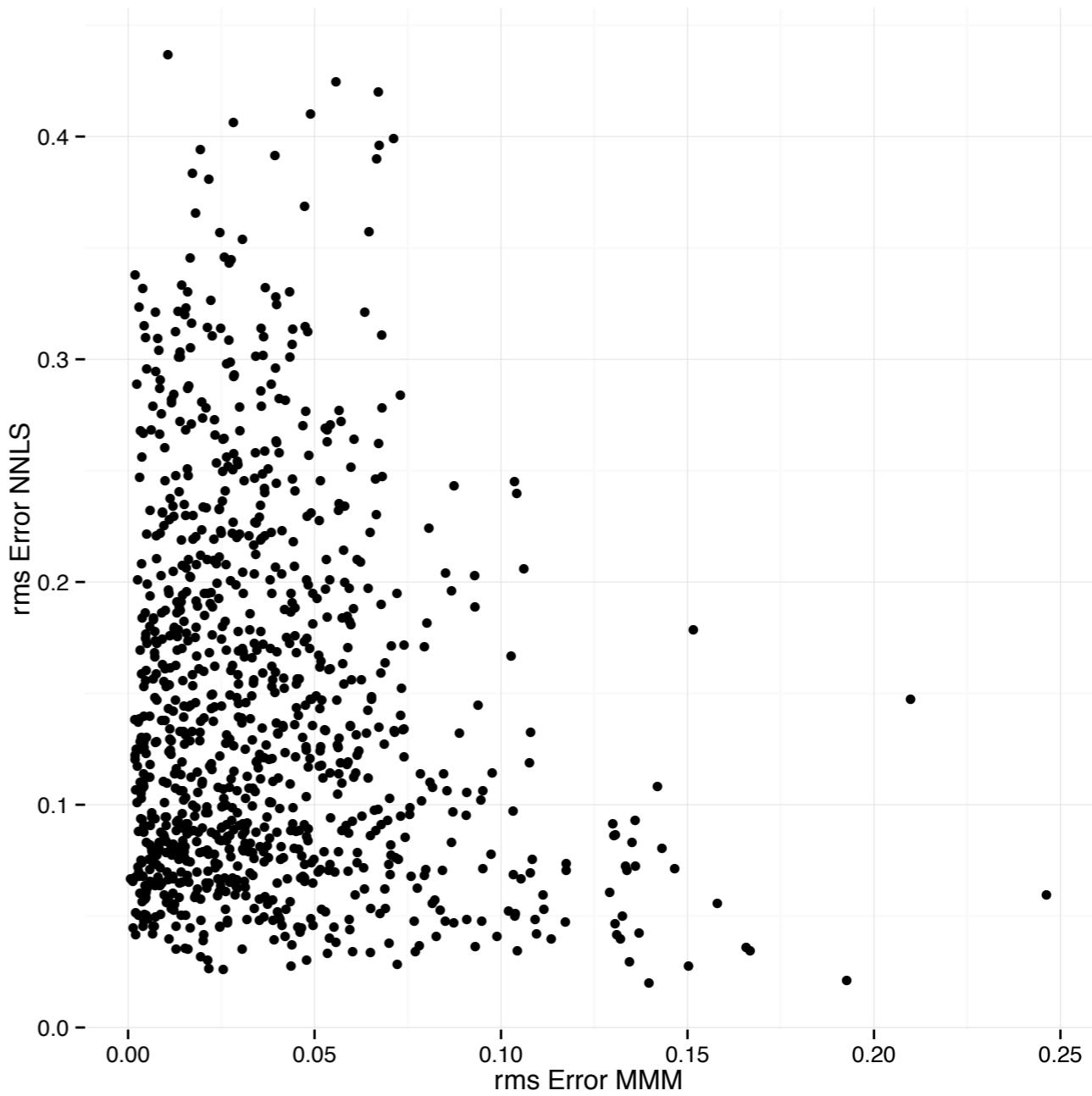
- Non Negative Least Square (NNLS)
  - using lsei (similar to deconRNAseq)
- Mixed Membership Model
  - Probabilistic modeling
    - Dirichlet distribution for A
    - X is a multinomial with proportions A\*S
  - Variational EM

# NNLS vs MMM

- 1000 simulations.
  - Where A is generated by Dirichlet(1)
  - And X is generated by poisson  $10.000 \cdot A \cdot S$  (reads)
  - Run NNLS and MMM and calculate rmse

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