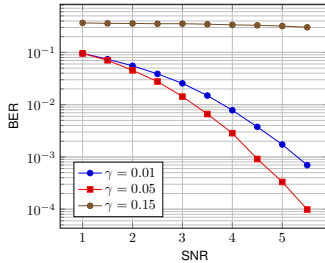


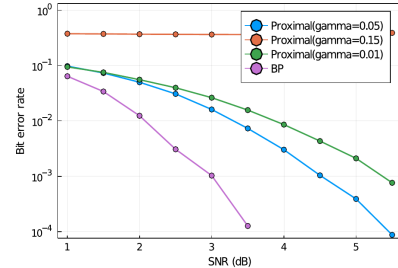
BA Besprechung

Andreas Tsouchlos

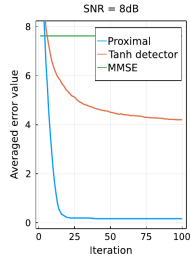
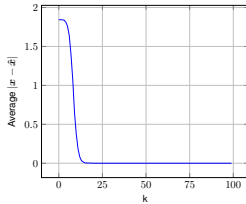




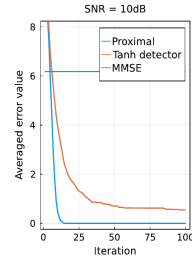
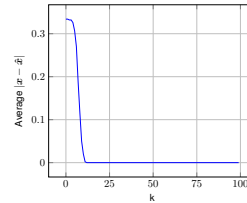
(a) BER of 204.33.486



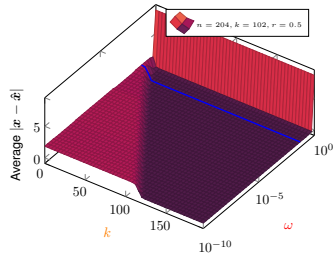
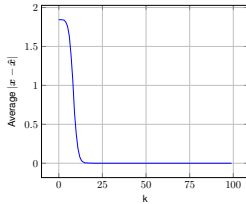
(b) Results from "Prox. Dec. for LDPC Codes"



(a) SNR = 8dB



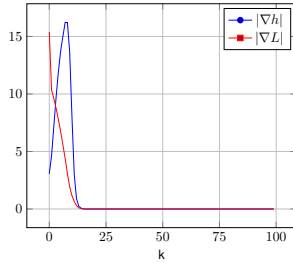
(b) SNR = 10dB



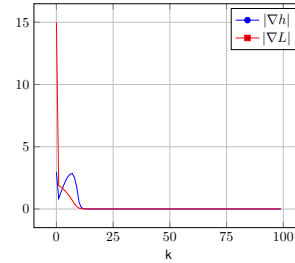
```

1  $s^{(0)} = \mathbf{0}$ 
2 for  $k = 0$  to  $K - 1$  do
3    $\mathbf{r}^{(k+1)} = \mathbf{s}^{(k)} - \omega \nabla L(\mathbf{s}^{(k)}; \mathbf{y})$ 
4   Compute  $\nabla h(\mathbf{r}^{(k+1)})$ 
5    $\mathbf{s}^{(k+1)} = \mathbf{r}^{(k+1)} - \gamma \nabla h(\mathbf{r}^{(k+1)})$ 
6    $\hat{\mathbf{x}} = \text{sign}(\mathbf{s}^{(k+1)})$ 
7   If  $\hat{\mathbf{x}}$  passes the parity check condition, break the loop.
8 end for
9 Output  $\hat{\mathbf{x}}$ 

```

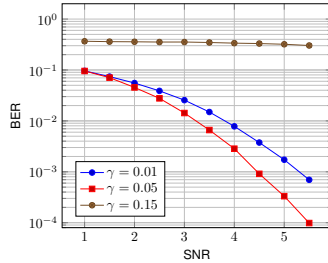


(a) $\text{SNR} = 8\text{dB}$

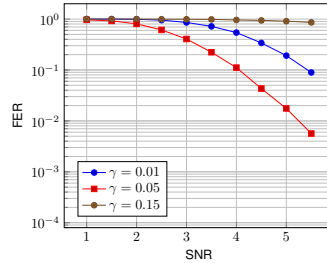


(b) $\text{SNR} = 10\text{dB}$

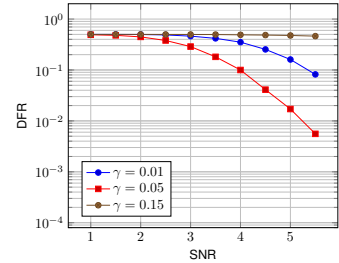
Proximal Decoder



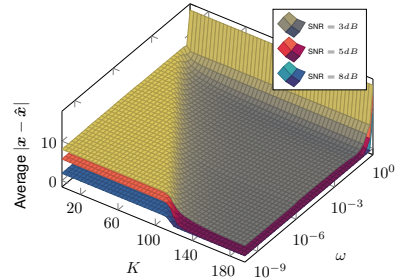
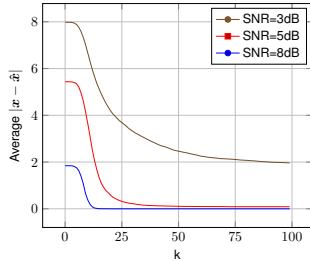
(a) BER of 204.33.486

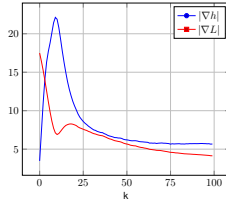


(b) FER of 204.33.486

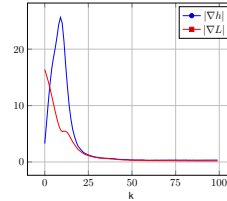


(c) DFR of 204.33.486

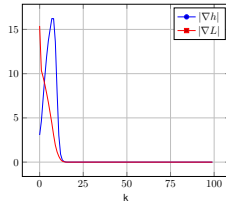




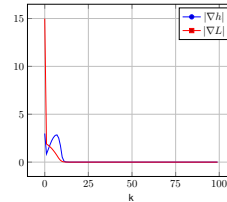
(a) SNR = 3dB



(b) SNR = 5dB



(c) SNR = 8dB



(d) SNR = 10dB

