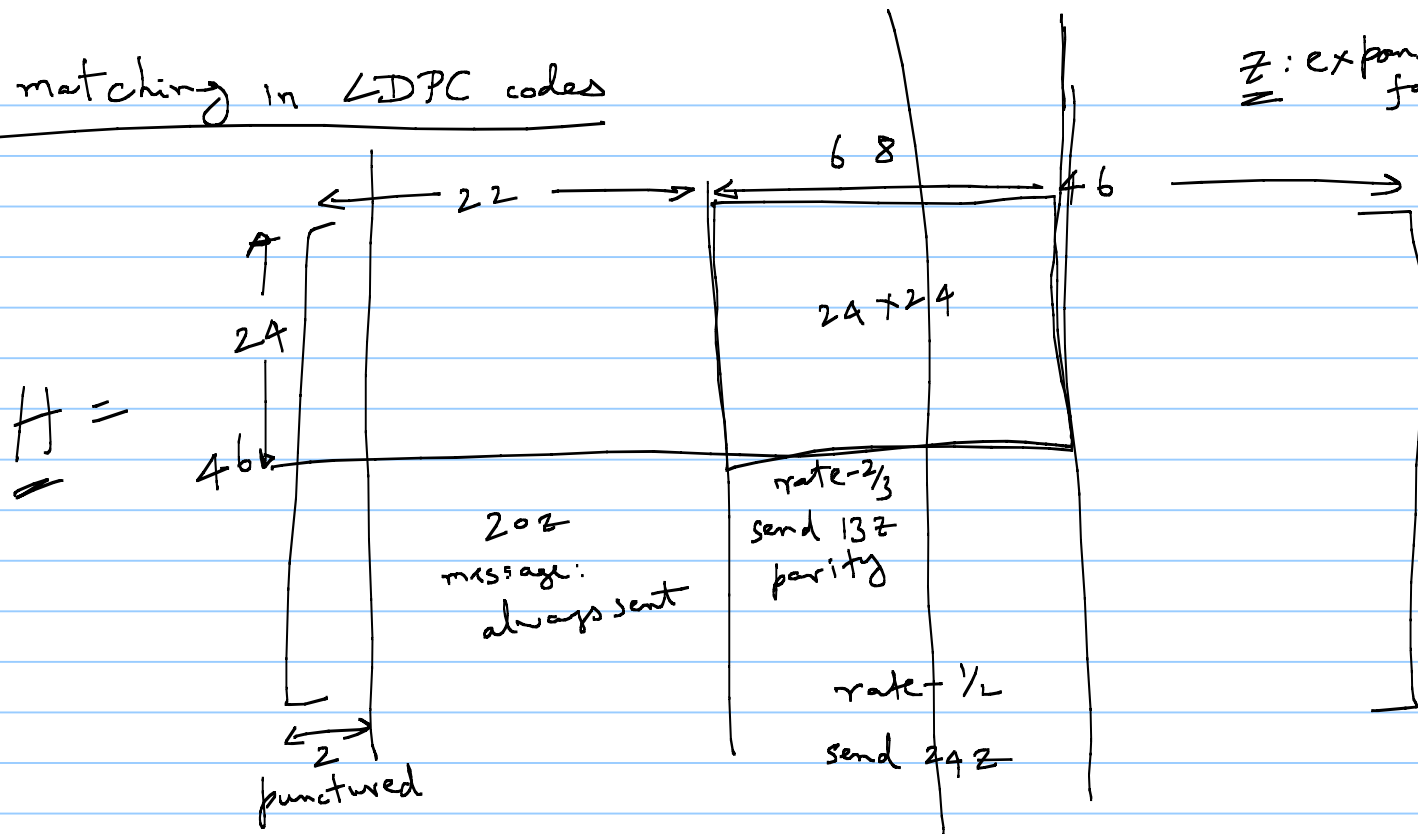


# Rate matching in LDPC codes

z: expansion factor



message bits:  $22z$

# of possible codeword bits:  $68z$

first  $22z$ : punctured (message)

$66z$  bits

rate- $\frac{1}{3}$

rate- $\frac{2}{3}$ : first  $33z$  bits are transmitted  
( $20z$ : message +  $13z$ : parity)

Decoder:  $13 \times 35$  left-top part

rate- $\frac{1}{2}$ :

first  $44z$  bits are transmitted ( $20z$ : message +  $24z$ : parity)  
last  $22z$  bits are punctured

Decoder:  $24 \times 46$  left-top part of  $H$  is used