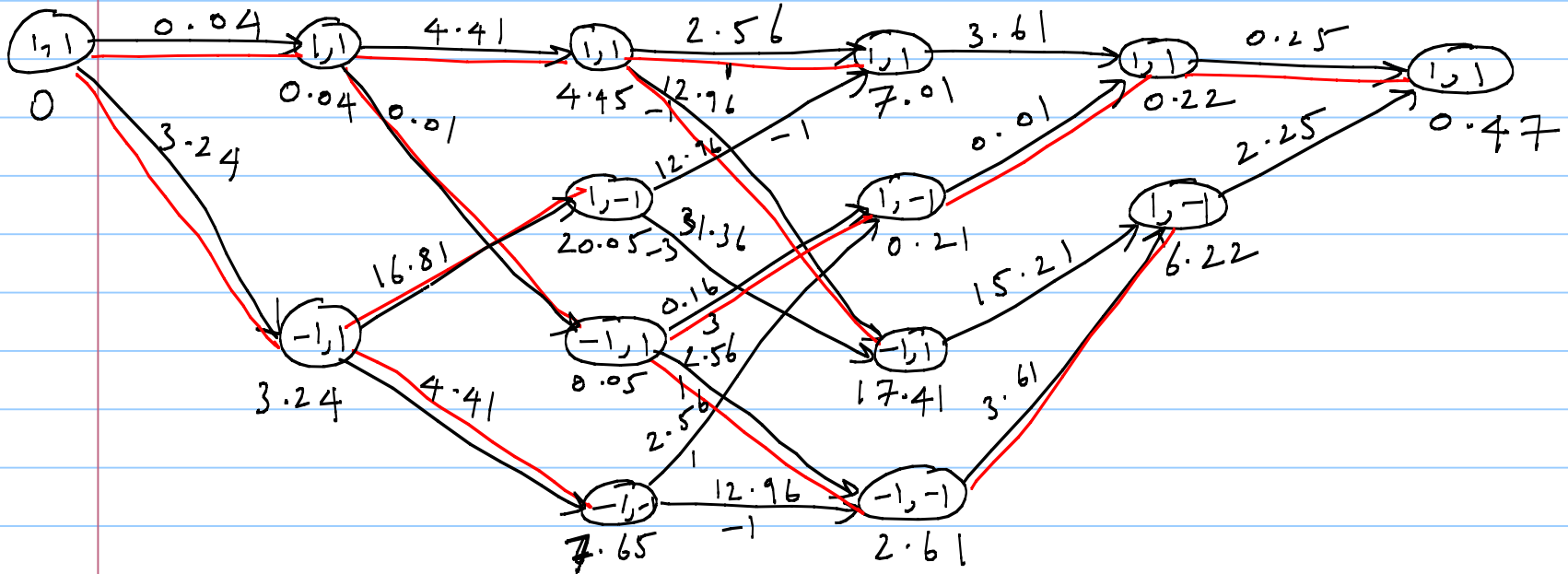


Ex: $M(z) = 1 - z^1 + z^{-2}$ $\mathcal{X} = \{\pm 1\}$

0.8 -1.1 2.6 -0.9 0.5



$\vec{s} = [+1 \quad -1 \quad +1]$

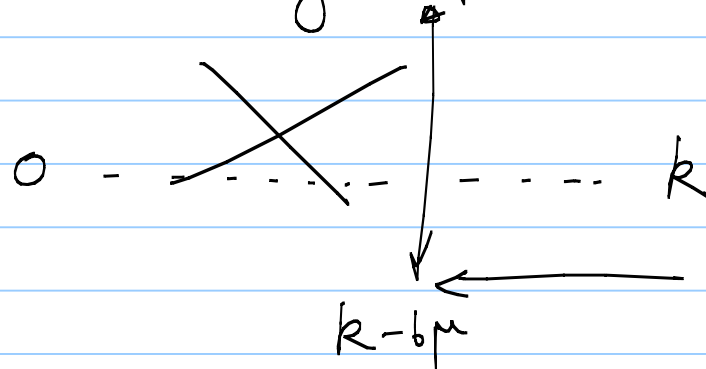
$|\mathcal{X}|^m$ - state \Rightarrow Stage m results in $|\mathcal{X}|^m$ survivors

- 1, 1, 1, 1
 - 1, 1, 3, 2
 - 1, 1, 1, 3
 - 1, 1, 3, 4
- ↔ ↓
?

Implementation issues:

1) Storage: Survivor paths.

→ Decoding depth $\sim 6\mu$



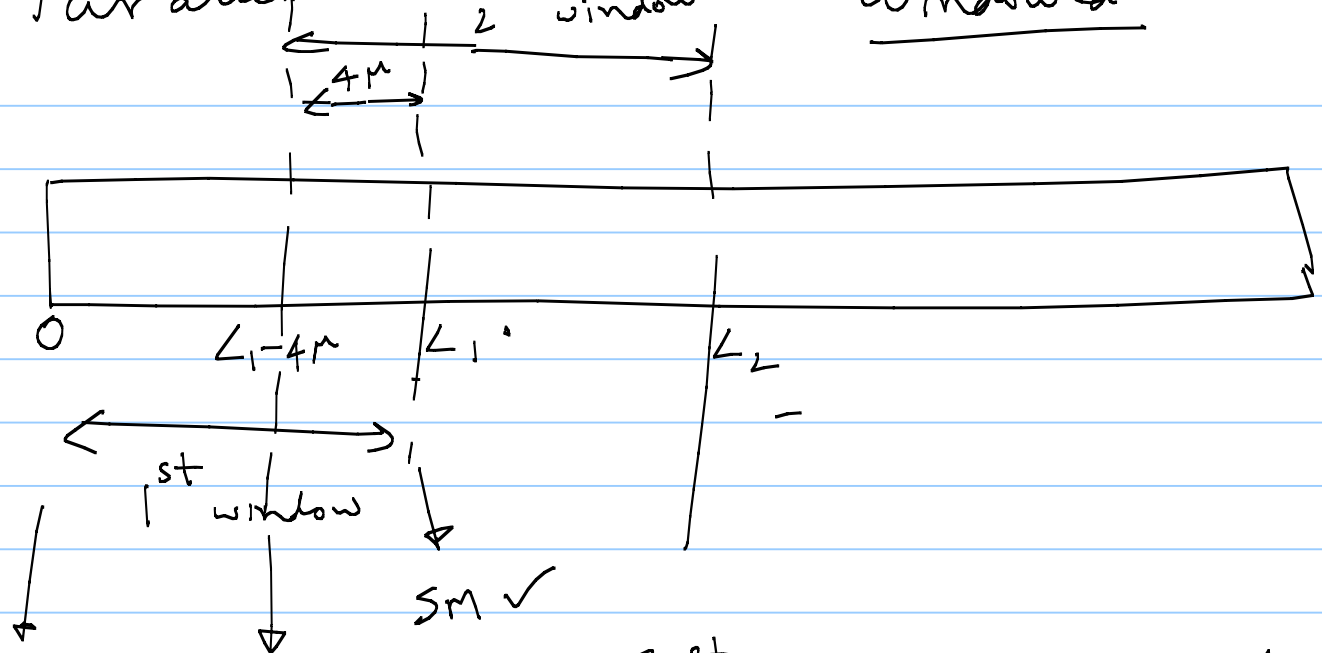
2) Overflow for state metrics

→ subtract a constant at each stage

3) Latency.

→ Decoding depth.

4) Parallelism 2nd window "Windowed"



Start in parallel Viterbi

$\left\{ \begin{array}{l} 1^{st} \text{ window: Stages } 0 \text{ to } L_1 + 4\mu \\ 2^{nd} \text{ window: Stages } L_1 - 4\mu \text{ to } L_2 + 4\mu \end{array} \right.$

$\left\{ \begin{array}{l} 1^{st} \text{ window: } 0 \text{ to } L_1 \\ 2^{nd} \text{ window: } L_1 + 1 \text{ to } L_2 \end{array} \right.$