## ターボ符号器における決定論的インタリー バの設計に関する研究

Kwame Ackah Bohulu2017/10/12

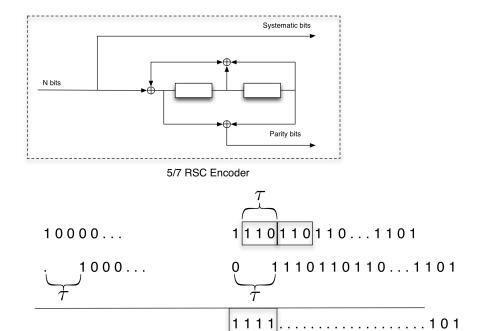


Figure 1: 5/7 RSC 符号器

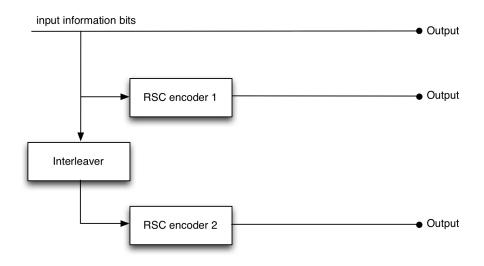


Figure 2: ターボ符号器

状態	時間	時間	状態
S'	i-1	i	$\mathbf{S}$
00(1)	$\alpha_{i-1}(1) \underbrace{\gamma_i(1,1)}_{\gamma_i(1,3)} \underbrace{\gamma_i(1,3)}_{\gamma_i(1,3)}$	$\alpha_i(1)$ $\beta_i(1)$	00(1)
01(2)	$\alpha_{i-1}(2) \xrightarrow{\gamma_i(2,1)} $ $\beta_{i-1}(2) \xrightarrow{\gamma_i(2,3)} $	$\alpha_i(2)$ $\beta_i(2)$	01(2)
10(3)	$\alpha_{i-1}(3) \xrightarrow{\gamma_i(3,2)} \beta_{i-1}(3) \xrightarrow{\gamma_i(3,4)} \gamma_i(3,4)$	$\alpha_i(3)$ $\beta_i(3)$	10(3)
11(4)	$\alpha_{i-1}(4)$ $\beta_{i-1}(4)$ $\gamma_{i}(4, 2)$ $\gamma_{i}(4, 4)$	$\begin{array}{c} \alpha_i(4) \\ \beta_i(4) \end{array}$	11(4)

Figure 3: 5/7 RSC 符号の Trellis 図

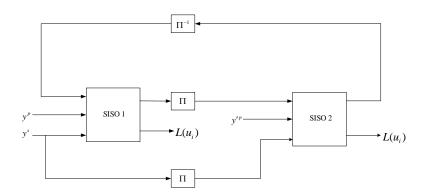


Figure 4: ターボ復号器