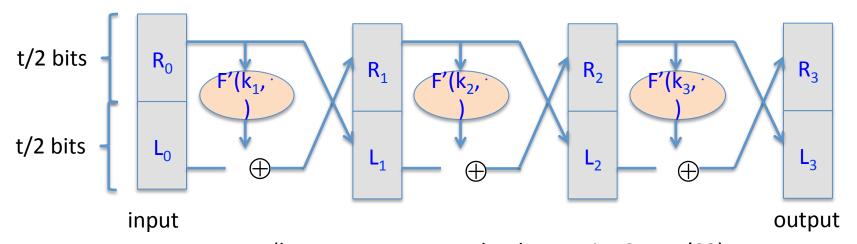
## Step 1: from $\{0,1\}^n$ to $\{0,1\}^t$ (t<n)

Want PRP on  $\{0,...,s-1\}$ . Let t be such that  $2^{t-1} < s \le 2^t$ .

Method: Luby-Rackoff with F':  $K \times \{0,1\}^{t/2} \longrightarrow \{0,1\}^{t/2}$  (truncate F)



(better to use 7 rounds a la Patarin, Crypto'03)