Channel Coding Theory: Homeworks 04/06/2008

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A. *Exercise A*

Consider the systematic recursive (feedback) convolutional code with generator (23,35) (octal form).

- Draw a serial concatenated code with interleaver (turbo code) base on such a convolutional code with rate $\frac{1}{2}$.

- Draw a parallel concatenated code with interleaver (turbo code) base on such a convolutional code with rate $\frac{1}{3}$.

- How to obtain a PCCC with rate $\frac{1}{2}$?

- How to obtain a PCCC with rate $\frac{1}{4}$?

- Draw the decoder for the SCCC with interleaver obtained in the first item of the exercise.

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