Specification and Performance of Proposed LDPC (2048,1723) Code

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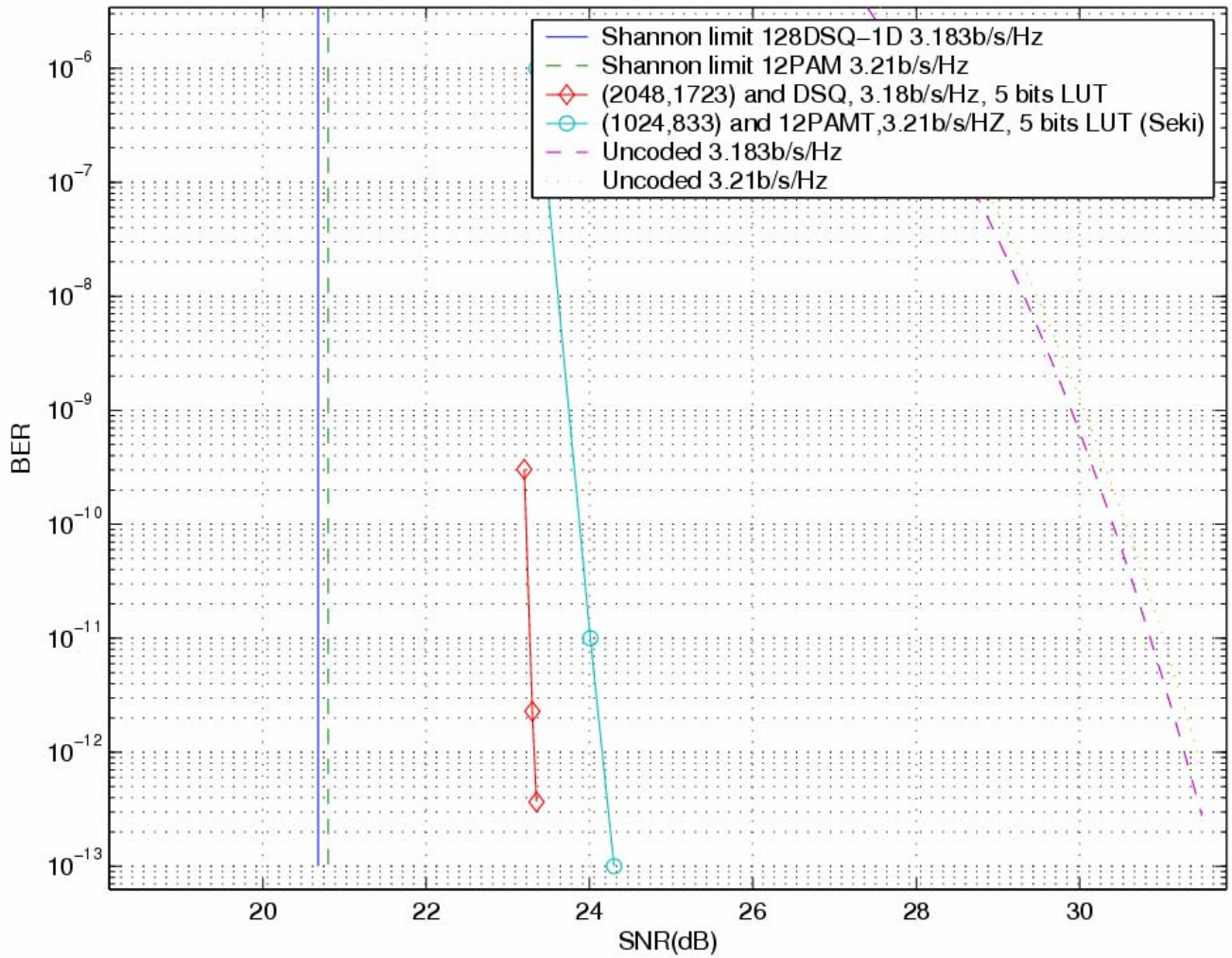
LDPC (2048,1723) Code

- **Task force previously approved adoption of LDPC code of block length 2048 with 325 parity bits.**
  - Comment # 89 in November Plenary
- **Requires generator matrix to uniquely specify code**
  - Systematic form: G = [P : I]
- **Generator matrix (G) and suggested parity check matrix (H) have been posted in 802.3an public area**

LDPC (2048,1723) Performance



- BER = 10^{-12} at SNR = 23.32dB
- 5-bit look up table
- Final point at SNR = 23.35dB: 2.184e13 bits simulated with 1 block error
- 128DSQ mapping as described in ungerboeck_1_1104.pdf and ungerboeck_2_0904.pdf
- G and H matrices as defined in 802.3an public area