1. *Gallager’s Low Density Parity Check (LDPC) codes*. We gave in class algorithm for decoding LDPC codes in the Binary Erasure Channel (BEC) and Binary Symmetric Channel (BSC). The analysis given in class addressed only the BEC channel. Analyze the bit flipping decoding algorithm for BSC in terms of error probability and complexity.

2. *Akavia-Venkatesan’s Soft local decoding of concatenated ABNNR codes*. We saw in class the Guruswami-Indyk unique decoding algorithm for ABNNR codes, and how to combine it with the Forney’s GMD decoding for decoding concatenated ABNNR codes. The resulting decoding algorithm in not local. Give a local algorithm for decoding concatenated ABNNR codes, and analyze it in terms of correctness and running time.