

Irregular Turbo-Like Codes

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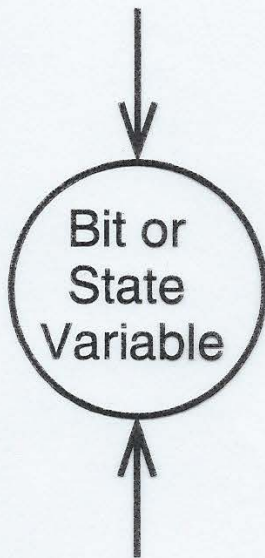
- ~ 2 years ago.
- Came out of work D. Mackay did on Irreg LDPC.
- Prelim results in Proc. Allerton 1999.
- Seems like ^{when you come up with} new idea, everybody's dog has results the next day.
- McEliece, & ten Brink, ~~?~~
- Our current focus: Short block

Suppose you are *told* the values of some bits^v in a transmitted codeword
(or states)

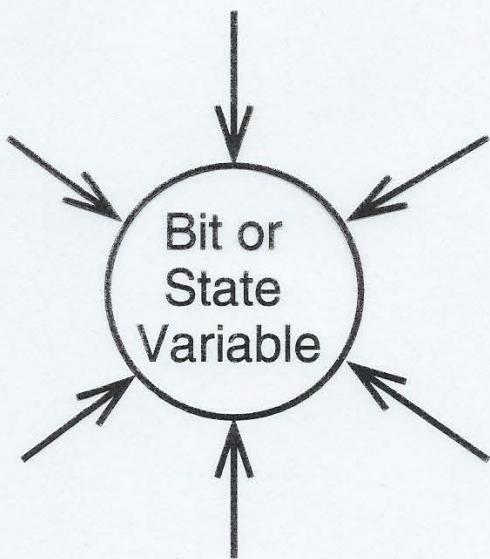
This effectively decreases the rate of the remaining code, making decoding easier

Can we get a free lunch
out of this?

Irregular codes: A free bite of lunch



Pinned down SLOWLY



Pinned down QUICKLY!

One way: ^{Signal} Using more
energy for some bits.

Not most elegant.



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