

# Information Theory and Networks

## Lecture 34: Information Theory, the Universe and Everything

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## Part I

# Information Theory, the Universe, and Everything



- Why have sex?
- Information content of DNA

## Section 1

### Genetics Intro

### Human Genome Resources

<http://www.ncbi.nlm.nih.gov/genome/guide/human/>  
<http://www.pnylab.com/pny/papers/cdna/cdna/index.html>  
<http://www.citeulike.org/user/zono/article/769969> [http://ieeexplore.ieee.org/xpls/abs\\_all.jsp?arnumber=581998&tag=1](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=581998&tag=1)  
<http://www.ncbi.nlm.nih.gov/pubmed/9344742>  
<http://dl.acm.org/citation.cfm?id=338586>  
<http://physics.aps.org/story/v9/st15>

## Section 2

# Information in DNA

## Further reading I

 Tracey Ho and Desmond S. Lun, *Network coding: An introduction*, Cambridge University Press, 2008.