TWO OR THREE THINGS I DO NOT KNOW ABOUT A NEW NETWORK ARCHITECTURE

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Three possible ways to think about it

1. Virtualise the Internet
   1. Replace model of node/router with virtual router
      1. (router+switch->mpls)
   2. Replace model of link/path with virtual link/path
      1. Aggregation/multipath

2. Plutarch
   1. Polyglot networking
   2. Set of APIs for interworking at different levels

3. Dis-graphic
   1. Replace graph model of network with something else
   2. Field?
Dis-graphic model is useful because...

- Wireless networks are not graph
  - There’s no “link” as a resource
  - There’s no obvious node (c.f. CDMA, Network Coding, virtual forwarding etc)
- See Cambridge/MIT work (Dina Katabi + Wenjun Hu)
- Given Mesh/ad hoc will be edge network for
  - both DSL and core wireless, and
    - same techniques work in P2P overlay =>
- we need this new model
Questions?

- Any?