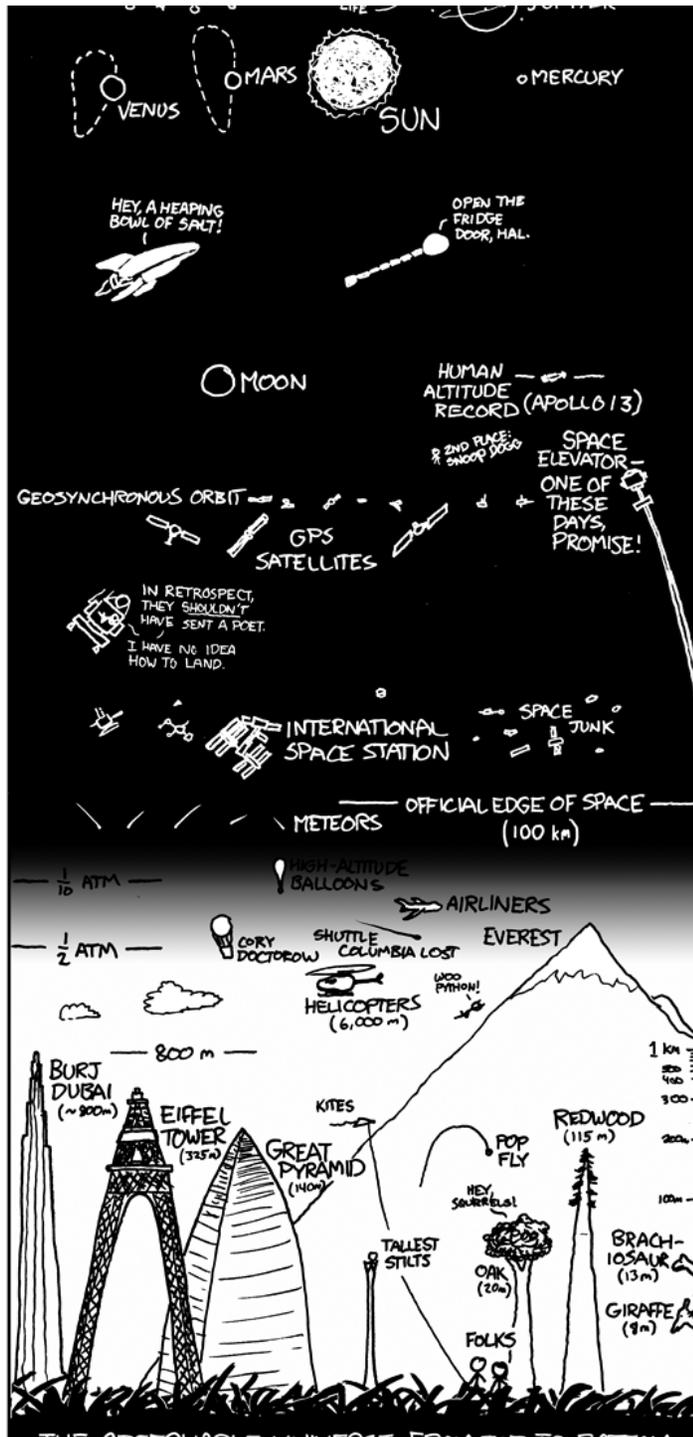


Delay Tolerant and Opportunistic Networks

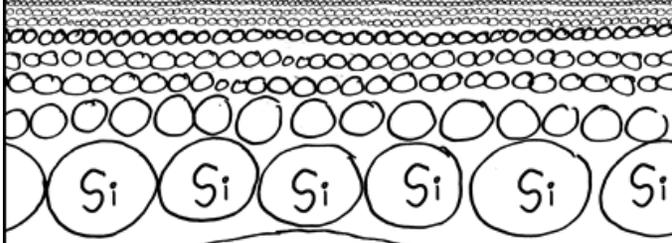
Past, current and future work

<http://www.cl.cam.ac.uk/~jac22>

jon.crowcroft@cl.cam.ac.uk



SPACE
ELEVATOR



ELECTRON
CLOUD

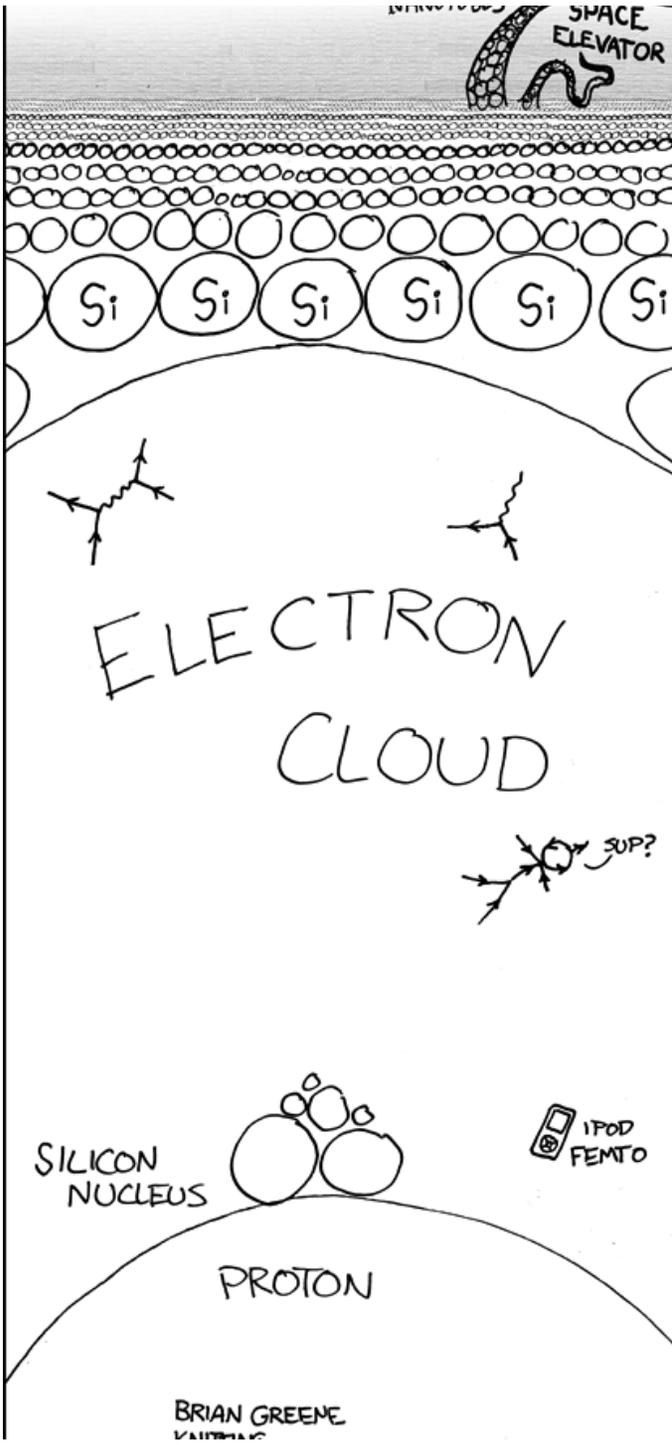
SILICON
NUCLEUS



IPOD
FEMTO

PROTON

BRIAN GREENE



Background reading for research

- Fall, K. Farrell, S. DTN: an architectural retrospective, Selected Areas in Communications, IEEE Journal, June 2008
Volume: 26, Issue: 5
- K. Fall, A Delay Tolerant Networking Architecture for Challenged Internets, Proc. of ACM SIGCOMM, 2003
- James Scott, Pan Hui, Jon Crowcroft, and Christophe Diot, Hagggle: A Networking Architecture Designed Around Mobile Users, (WONS), 2006.

- Jorg Ott and Dirk Kutscher, A Disconnection-Tolerant Transport for Drive-thru Internet Environments, Proc. of IEEE Infocom, 2005.
- Philo Juang, Hidekazu Oki, Yong Wang, Margaret Martonosi, Li-Shiuan Peh, Daniel Rubenstein, Energy-Efficient Computing for Wildlife Tracking: Design Tradeoffs and Early Experiences with ZebraNet, Proc. of ASPLOS, 2002.
- Sushant Jain Kevin Fall and Rabin Patra

- W. Zhao , M. Ammar , E. Zegura, A message ferrying approach for data delivery in sparse mobile ad hoc networks, Proc. of ACM/IEEE MOBIHOC, 2004.
- Wenrui Zhao, Mostafa Ammar and Ellen Zegura, Controlling the Mobility of Multiple Data Transport Ferries in a Delay-Tolerant Network, Proc. of IEEE INFOCOM, 2005.
- Wenrui Zhao and Mostafa Ammar, Message Ferrying: Proactive Routing in Highly-

- A. Vahdat and D. Becker, Epidemic routing for partially connected ad hoc networks, Technical
- Report CS-200006, Duke University, 2000.
- Evan P.C. Jones and Paul A.S. Ward, Routing Strategies for Delay-Tolerant Networks, 2006.
- Thrasyvoulos Spyropoulos, Konstantinos Psounis, and Cauligi Raghavendra, Efficient Routing in

- R. Groeneveld, P. Nain and G. Koole,
"Message Delay in Mobile Ad Hoc Networks",
Proc. of PERFORMANCE, 2005.
- A. Seth, D. Kroeker, M. Zaharia, S. Guo, S.
Keshav, Low-cost Communication for Rural
Internet Kiosks Using Mechanical Backhaul,
Proc. of ACM/IEEE MOBICOM, 2006.
- Joerg Widmer, and Jean-Yves Le Boudec,
Network Coding for Efficient Communication

- Jeremie Leguay, Anders Lindgren, James Scott, Timur Friedman and Jon Crowcroft,
Opportunistic Content Distribution in an Urban Setting,
Proc. of ACM SIGCOMM workshop on Challenged Networks (CHANTS), 2006.
- Wei-Jen Hsu, Thrasyvoulos Spyropoulos, Konstantinos Psounis and Ahmed Helmy,
Modeling Time-variant
User Mobility in Wireless Mobile Networks, to appear in IEEE INFOCOM 2007