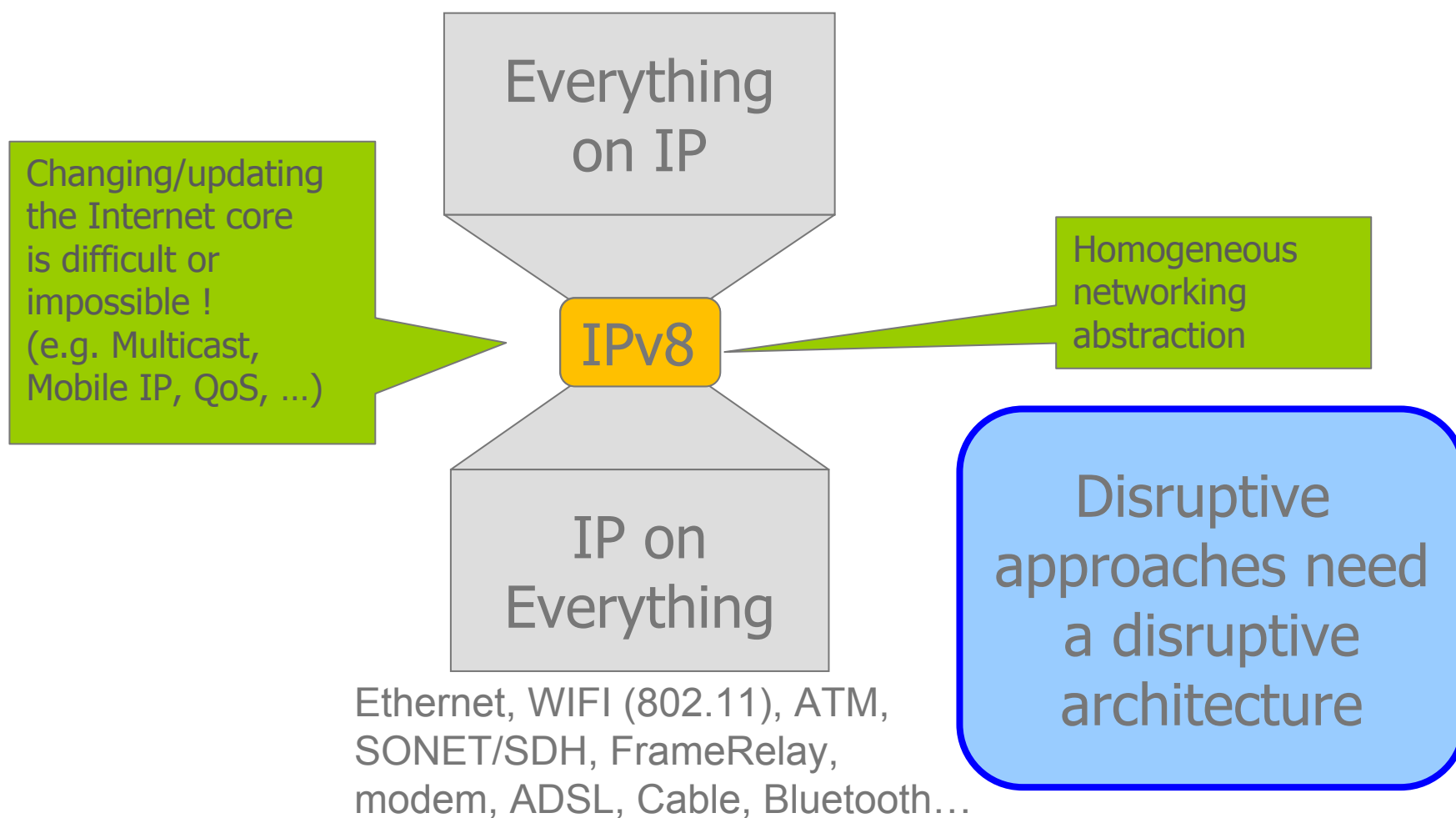


Clean-slate Approaches: Needs and Opportunities

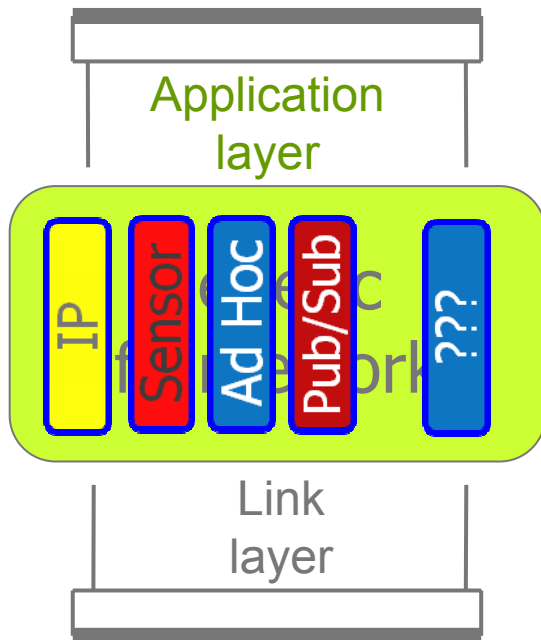
- Dr. Martin May
- Thomson, Paris Research Lab, France
- Coordinator ANA Project – ETH Zurich, Switzerland

The Internet Hourglass

Voice, Video, P2P, Email, youtube,
Protocols – TCP, UDP, SCTP, ICMP,....



Heterogeneity



- We have to extend the waist and host more paradigms
- Future networks have to scale in size AND functionality
- Federation instead of homogeneous abstraction

We need a framework that is able to host multiple networks
→ ANA project

FIRE Opportunities

- **FIRE should be used for clean slate approaches!**
 - Use OneLab2 to interconnect these networks
- **Architectures are not built – they grow**
 - Built networks and frameworks
 - Call for **intuition and experimentation**
- **We have to conduct research in new communication paradigms:**
 - Haggie, PodNet
 - Opportunistic communication
 - Mobile social networks
- **Services have to be built in the network – not on top of it**

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- Thank you
 - ANA framework prototype is available at:
<http://www.ana-project.org/>