



# Current eVLBI development at Metsähovi Radio Observatory

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# 10Gbit/s connectivity

- Dark fiber to Funet hub installed in March
- Equipment installed two months ago
- Extreme Networks Summit 450 switch, two 10Gbit/s ports, 24 gigabit ports
- 10Gbase-ZR optics (link was 50 km long)
- Price essentially same as for 1Gbit/s
- Works very nicely after four hours of installation



# Problems

- Main problem is the lack of places to test with
- JIVE has one nearly decent microcomputer that is sometimes connected to network and even available
- Jodrell Bank has dedicated lightpaths to JIVE that has no computers
- Onsala might have one decent computer soon...



# New protocol developments

- eVLBI is struggling to push data through long fat pipes
- In case of success the data is completely wrongly organized for grid-based correlation
- Fortunately a simple solution exists: A protocol that distributes the data during transfer



# Results...

- Only a small change to the VSIB driver is needed to treat the basebands as separate devices
- Instead of one 1G stream we transfer 16 streams, 64M each
- And one correlating computer has data from all the stations