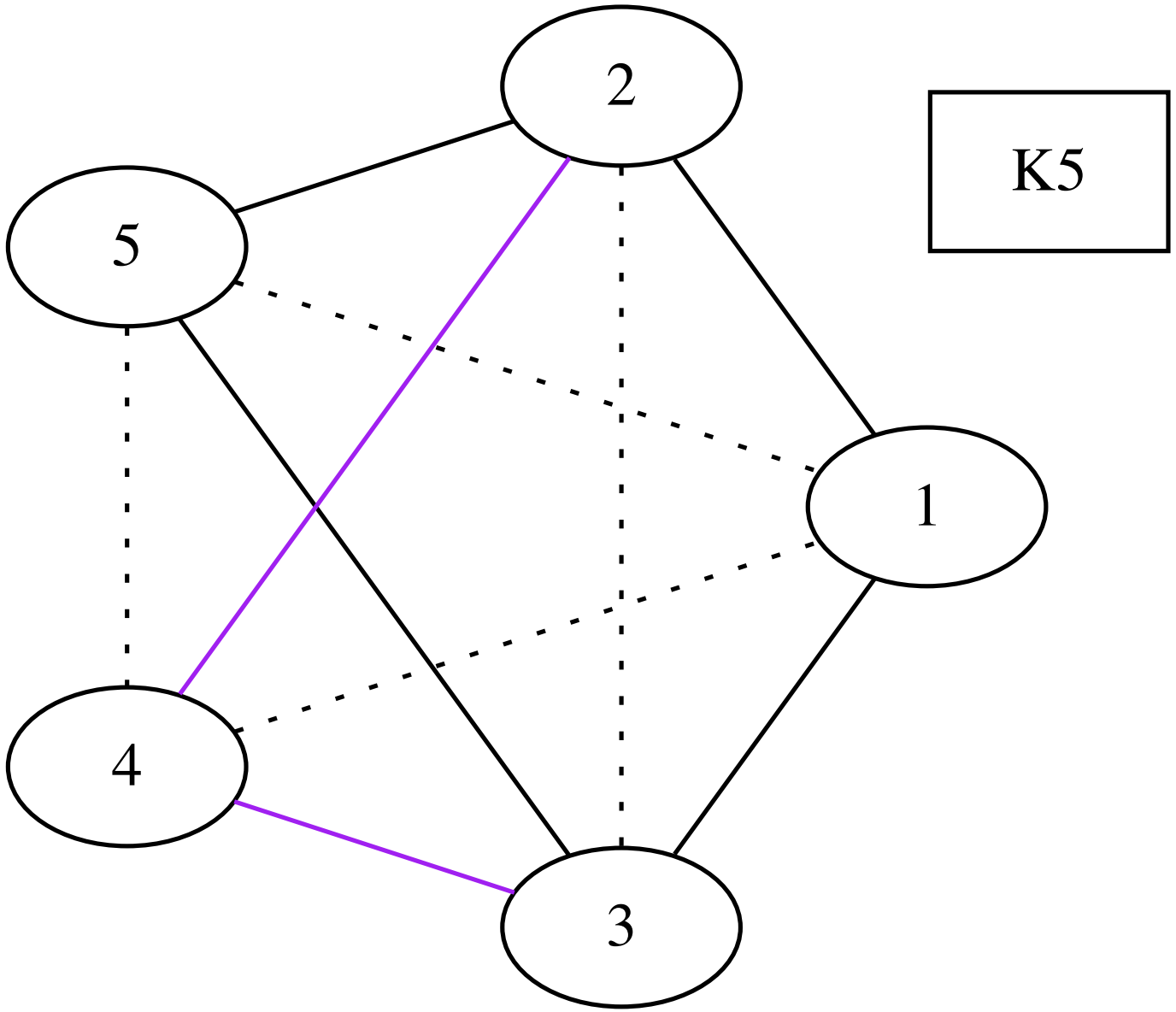
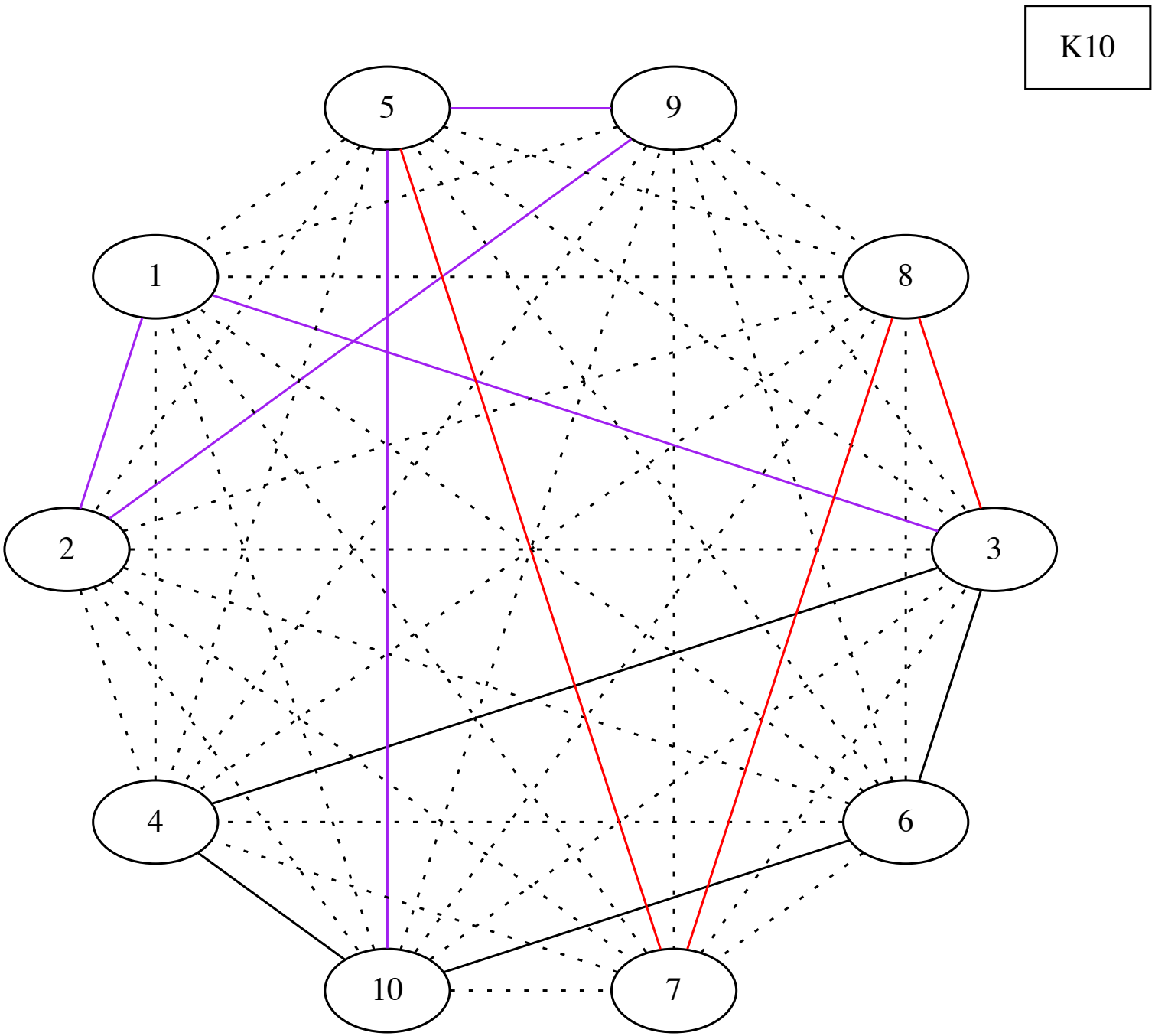
Update to LSR Dynamic Flooding

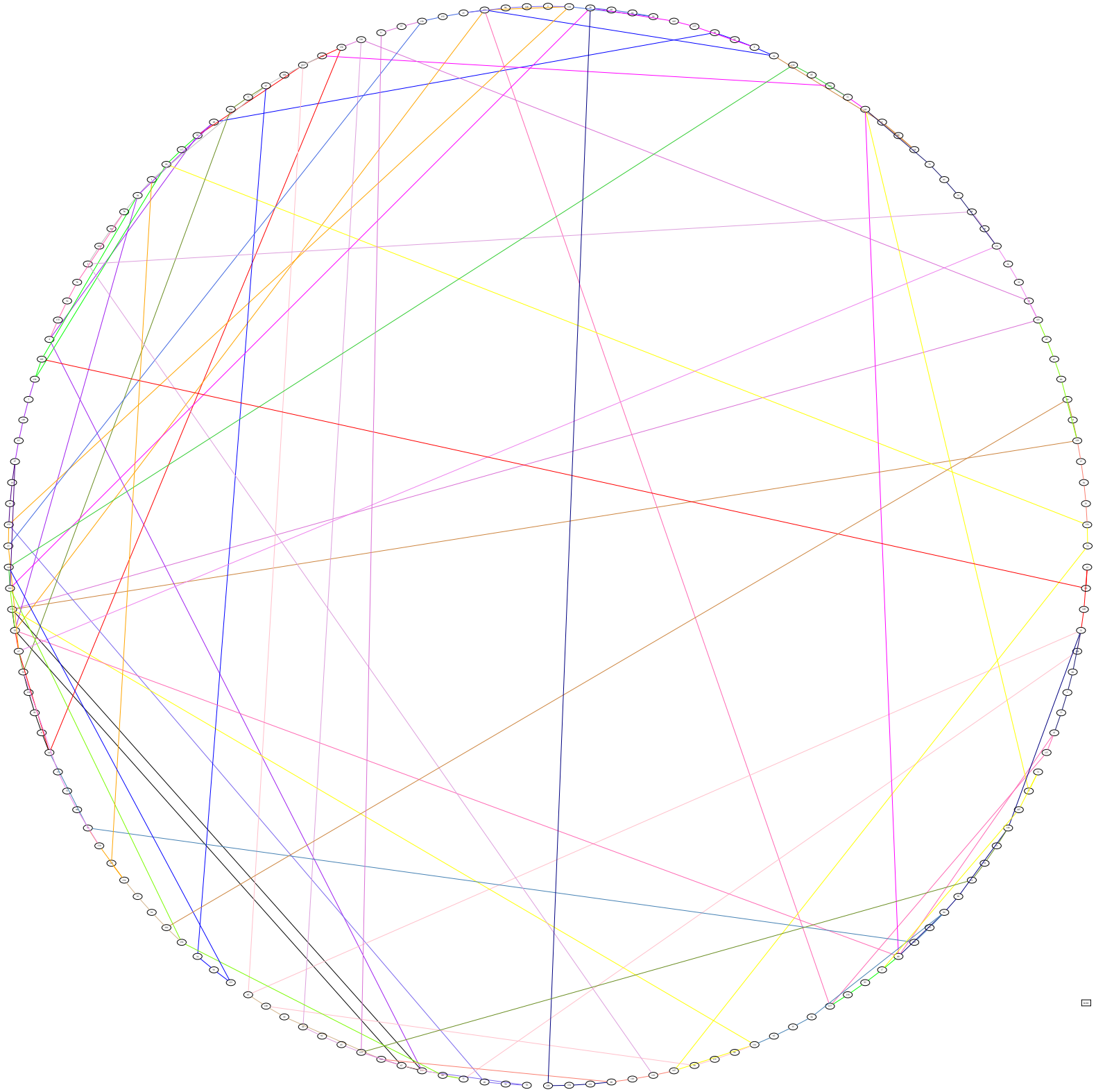
Tony Li

Since IETF 103…

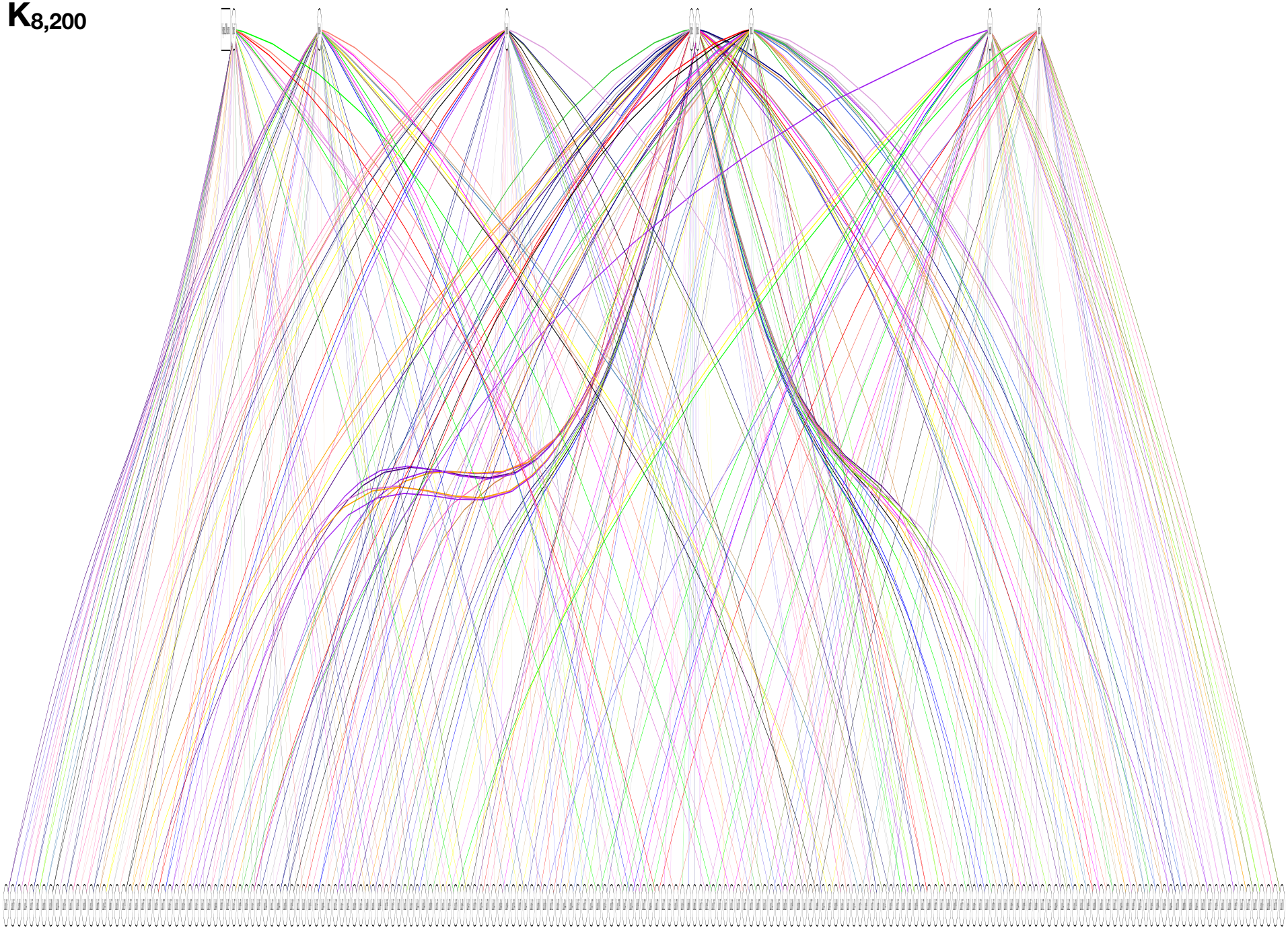
- draft-li-lsr-dynamic-flooding adopted by WG, now draft-ietf-lsr-dynamic-flooding
- Selected simulation results
- Two outstanding issues remain:
  - Detailed behavior for temporary additions to the flooding topology
  - Inclusion of pseudonodes as part of the flooding topology


2
K5
5
1
4
3

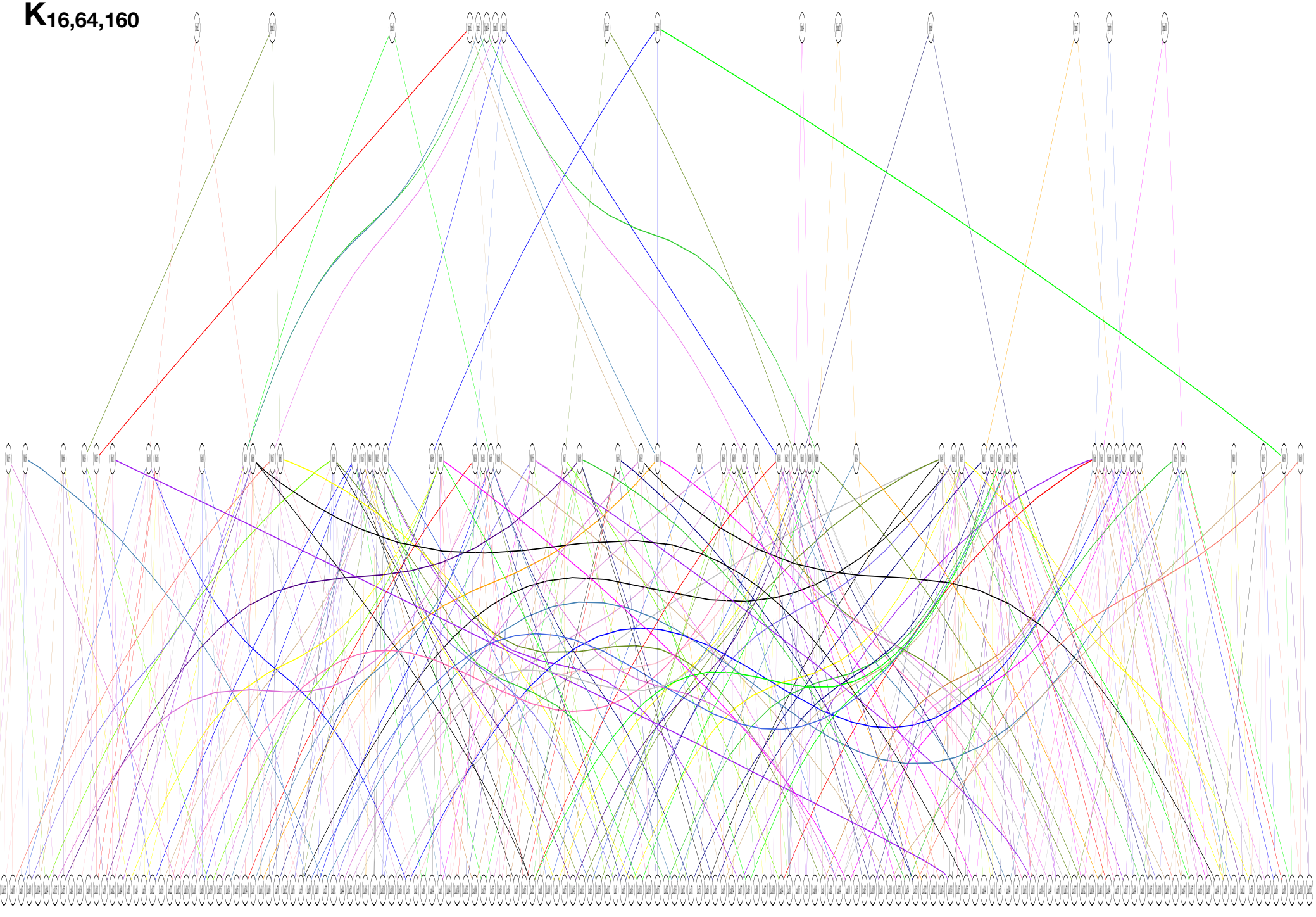

K10
5
9
1
8
2
3
4
6
10
7

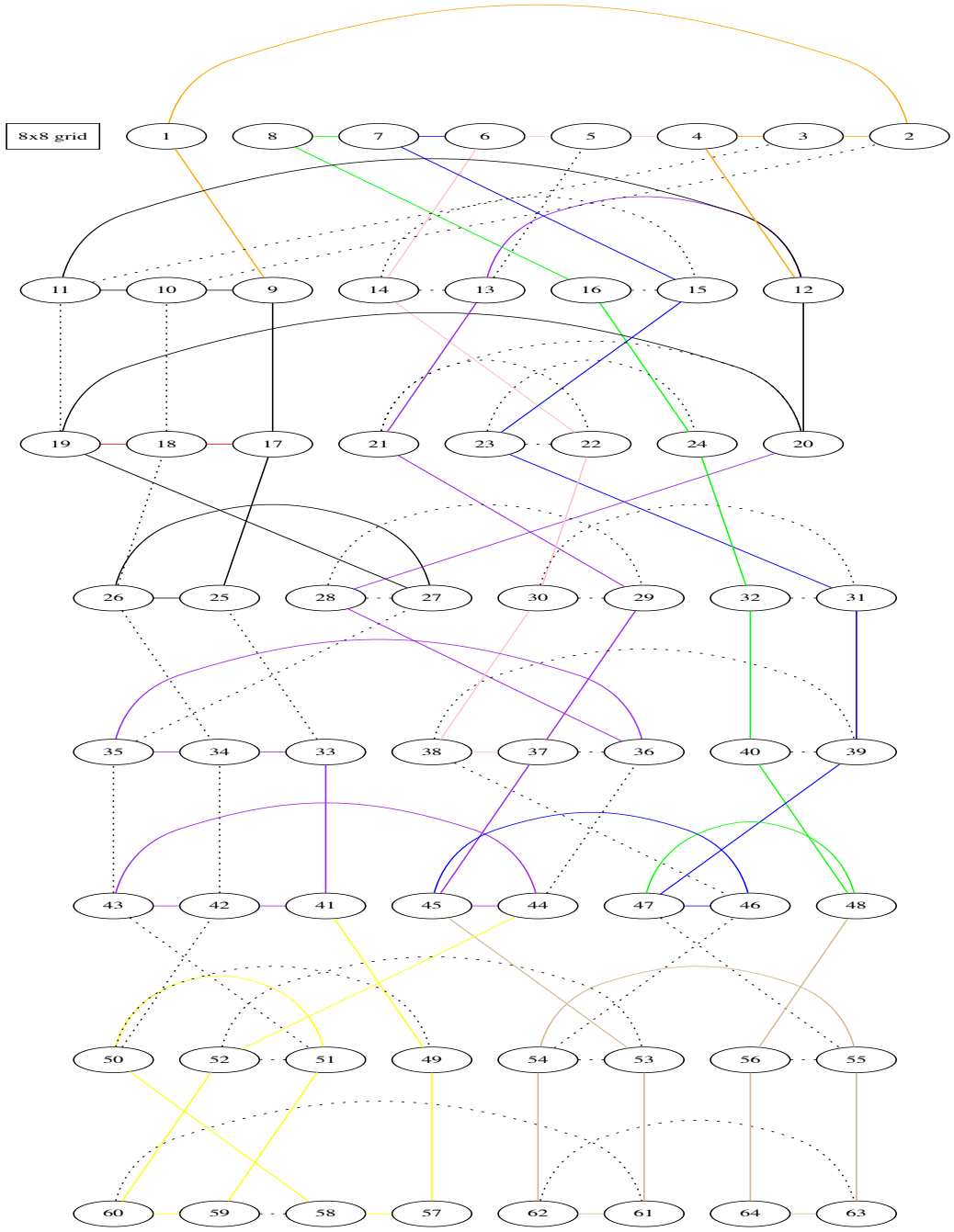


$K_{8,200}$



$K_{16,64,160}$




8x8 grid
1
8
7
6
5
4
3
2
11
10
9
14
13
16
15
12
19
18
17
21
23
22
24
20
26
25
28
27
30
29
32
31
35
34
33
38
37
36
40
39
43
42
41
45
44
47
46
48
50
52
51
49
54
53
56
55
60
59
58
57
62
61
64
63

Issue: Temporary Flooding

- Q: How much topology should be temporarily added to the FT when there are multiple failures on the FT?

    1. As much as possible. We want to repair the partition as quickly as possible to minimize convergence time.

    2. As little as possible. Adding too much topology may trigger the cascade failure that Dynamic Flooding avoids.

Issue: Pseudonodes in the FT

- Q: Should we allow the Area Leader to specify LANs as part of the FT?

    1. Put all LANs on the FT anyway. Simplifies the protocol.

    2. Too many LANs can be problematic. Specificity is necessary to ensure correctness.