SCTP
(Individual submissions)

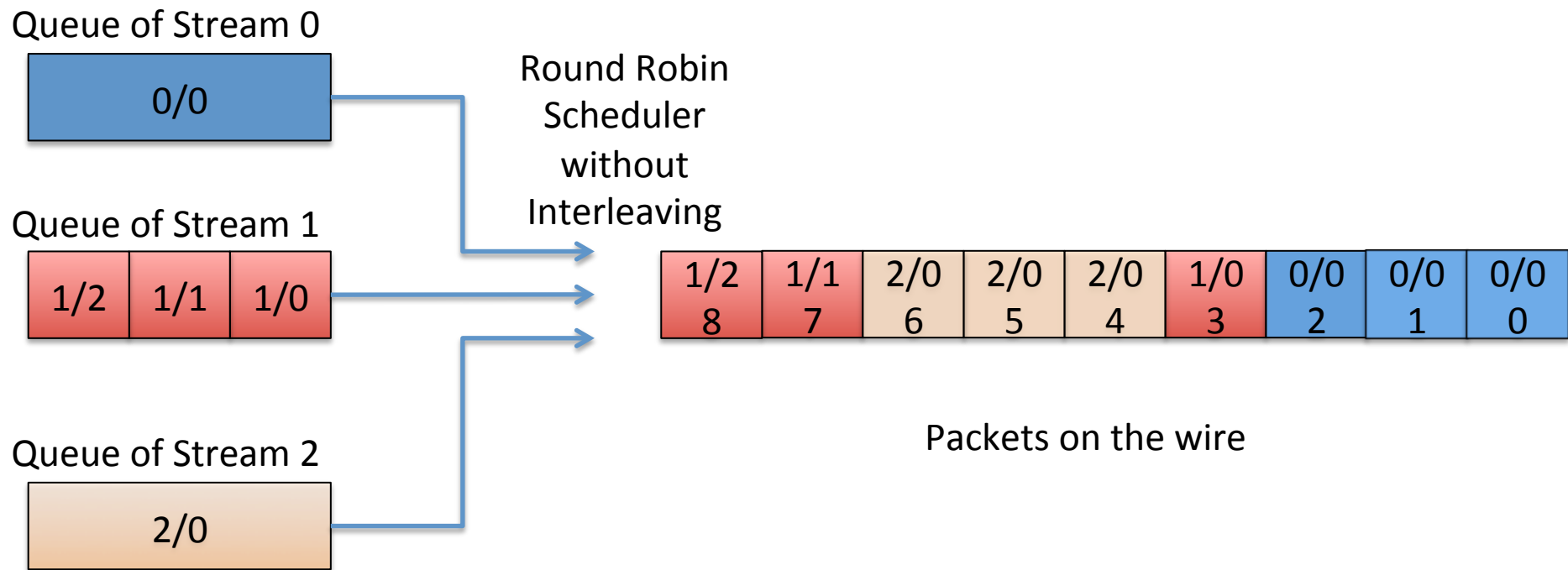Randall Stewart (randall@lakerest.net)

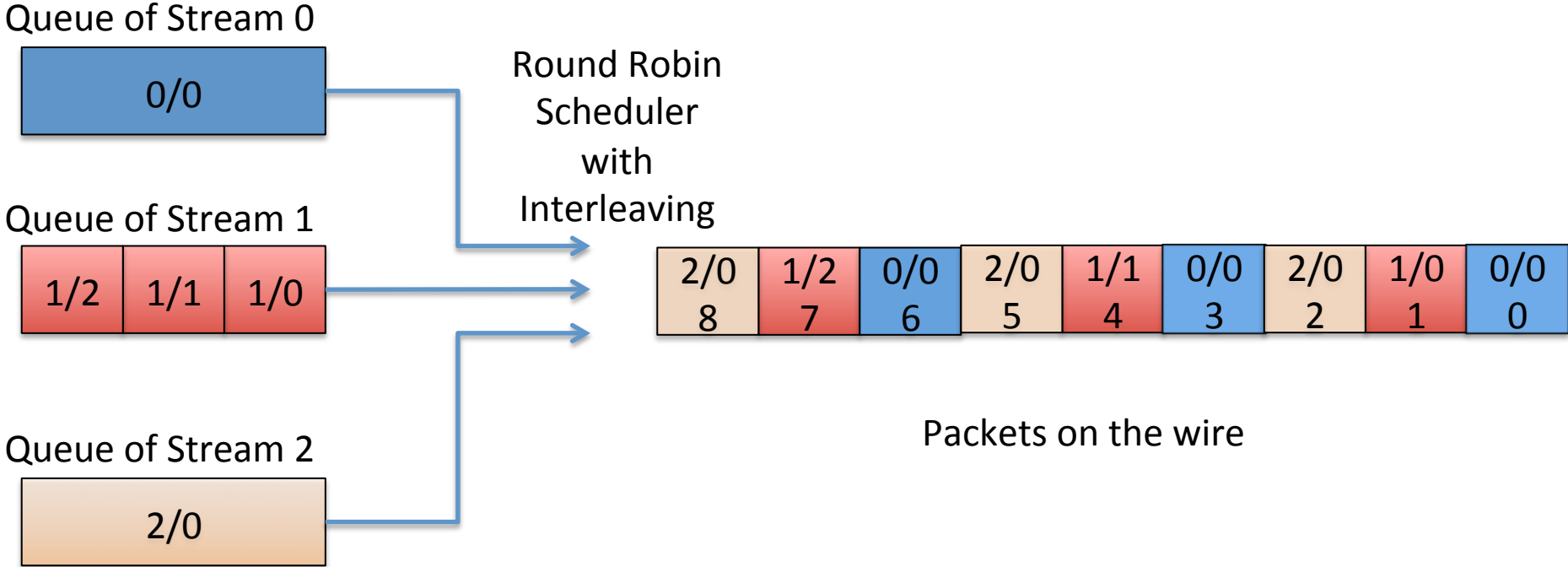Michael Tüxen (tuexen@fh-muenster.de)

draft-tuexen-tsvwg-sctp-prpolicies

- Limited Retransmission Policy
  - Limits the number of retransmissions
  - Used by RTCWeb
- Priority Policy
  - Allows "important" messages get in the socket buffer, even if filled with "less important messages"
  - Used by IPFIX
- Almost complete
- Feedback appreciated!

Sender Side Head of Line Blocking

Queue of Stream 0

0/0

Round Robin
Scheduler
without
Interleaving

Queue of Stream 1

1/2	1/1	1/0

Queue of Stream 2

2/0

1/2 8	1/1 7	2/0 6	2/0 5	2/0 4	1/0 3	0/0 2	0/0 1	0/0 0

Packets on the wire

With Interleaving Support

Queue of Stream 0

0/0

Round Robin
Scheduler
with
Interleaving

Queue of Stream 1

1/2	1/1	1/0

Queue of Stream 2

2/0

2/0 8	1/2 7	0/0 6	2/0 5	1/1 4	0/0 3	2/0 2	1/0 1	0/0 0

Packets on the wire

draft-stewart-tsvwg-sctp-ndata

- SCTP minimizes receiver side head of line blocking, but the sender can't interleave messages from different streams.
- This extension allows interleaving traffic from multiple streams at the sender by using a explicit sequence number for reassembly.
- Stream schedulers are crucial here, so draft-tuexen-tsvwg-sctp-scheduling will be merged in.
- Use case: RTCWeb
- Currently being implemented.
- Feedback appreciated!