



# Internet2 Land Speed Record

Rich Carlson  
Chair, Internet2 Land Speed Record  
Judging Panel

October 14, 2003

# Internet2 Land Speed Record

## ■ Rules in brief

- Ultimate end-to-end networking
- Open to everyone at anytime
- 10min. X 100 km x 2 routers minimum
- TCP/IP (IPv4 and IPv6)
- NGI-type networks
- Winner must exceed previous record by 10%



<http://lsr.internet2.edu/>



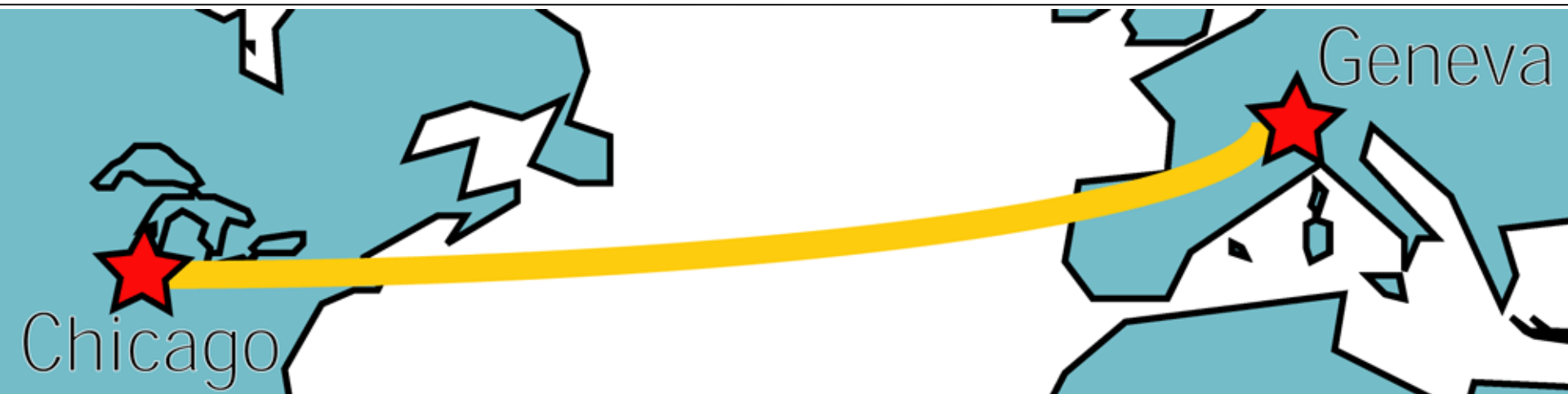
# Internet2 Land Speed Record IPv6 Single and Multiple Streams

## ▪ Raw Metrics

- 6 May 2003
- 412 gigabytes
- 1 hour
- 7,067 kilometers

## ▪ Results

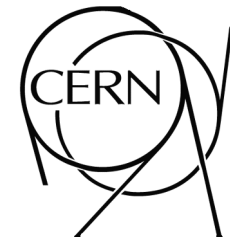
- 983 megabits per second
- Chicago to Geneva
- 6,947 terabit-meters/second



# Record-Setting Team

- California Institute of Technology (Caltech)
- CERN

CALTECH





# Internet2 Land Speed Record IPv6 Single and Multiple Streams

Caltech

Harvey Newman

Sylvain Ravot

DataTAG/CERN

Edoardo Martelli

Jean-Philippe Martin-Flatin

CERN

Daniel Davids

Olivier Herve Martin

Paolo Moroni





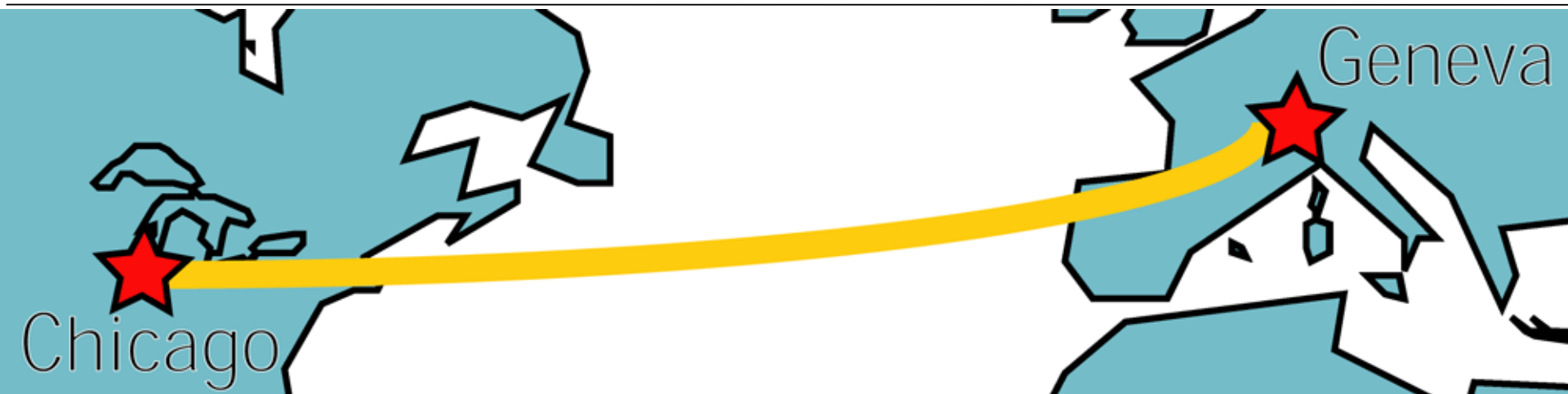
# Internet2 Land Speed Record IPv4 Single and Multiple Streams

## ▪Raw Metrics

- 1 October 2003
- 1.1 Terabytes
- 26 minutes
- 7,067 kilometers

## ▪Results

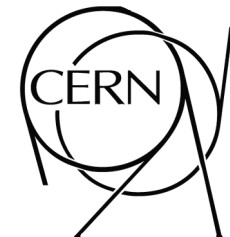
- 5.44 gigabits per second
- Chicago to Geneva
- 38,420.54 terabit-meters/second



# Record-Setting Team

- California Institute of Technology (Caltech)
- CERN

CALTECH





# Internet2 Land Speed Record IPv4 Single and Multiple Streams

## Caltech

Julian Bunn  
Steven Low  
Dan Nae  
Harvey Newman  
Sylvain Ravot  
Suresh Singh  
Yang Xia  
Sylvain Ravot

## CERN

Daniel Davids  
Andreas Hirstius  
Sverre Jarpe  
Edoardo Martelli  
Olivier Herve Martin

