

# Coding for efficient NetWork Communications Research Group (NWCRG)

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# *Welcome!*

- Our goal:

**Foster research in network and application layer coding to improve network performance**

- Codes and coding libraries
- Protocols to facilitate the use of coding in existing systems
- Real-world use cases and work in progress

# Note Well – Intellectual Property



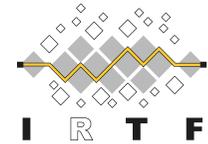
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- See [RFC 7154](#) (Code of Conduct) and [RFC 7776](#) (Anti-Harassment Procedures), which also apply to IRTF

# Goals of the IRTF



- The Internet Research Task Force (IRTF) focuses on longer term research issues related to the Internet while the parallel organisation, the IETF, focuses on shorter term issues of engineering and standards making
- **The IRTF conducts research; it is not a standards development organisation**
- While the IRTF can publish informational or experimental documents in the RFC series, its primary goal is to promote development of research collaboration and teamwork in exploring research issues related to Internet protocols, applications, architecture, and technology
- See “An IRTF Primer for IETF Participants” – [RFC 7418](#)

# *Administrivia*

- **Charter and documents**

- <https://datatracker.ietf.org/group/nwcrp/charter/>

- **Github**

- <https://github.com/irtf-nwcrp/rg-materials>

- **Mailing list**

- subscription: <https://www.irtf.org/mailman/listinfo/nwcrp>

- **Material**

- Direct links from announcement IETF page:
- <https://datatracker.ietf.org/meeting/upcoming>
- Github repository:
- <https://github.com/irtf-nwcrp/rg-materials/tree/master/ietf110-2021-03-11> online

## Administrivia (2)

- Session is being recorded



- Blue sheet is automatically filled
  - based on Meetecho/datatracker logs
  - datatracker authentication
- Queue management: press the "raise hand" icon

# Agenda

00- Welcome, administrative and general matters  
(Chairs) (10')

01- "BATS Coding Scheme for Multi-hop Data Transport" I-D  
(Raymond Yeung) (10+5')  
<https://datatracker.ietf.org/doc/draft-irtf-nwcrp-bats/>

02- "Coding and congestion control in transport" I-D  
(Nicolas Kuhn) (10+5')  
<https://datatracker.ietf.org/doc/draft-irtf-nwcrp-coding-and-congestion/>

03- "About latency/reliability for block and sliding  
window codes"  
(Morten V. Pedersen) (10')

04- Wrap-up, next steps  
(Chairs, all) (5')

# Our group I-D news (1)

- Done
  - "Network coding for satellite systems"
    - [RFC 8975](#)
- IRSG review asked:
  - "NC for CCN/NDN: Considerations and Challenges"
- Active I-D
  - "BATS Coding Scheme for Multi-hop Data Transport"
    - now RG-Item document
    - see item 01-
  - "Coding and congestion control in transport"
    - see item 02-

## *Our group I-D news (2)*

- Standby, action needed:
  - "Coding for QUIC" and "RLC Forward Erasure Correction (FEC) Schemes for QUIC"
    - To be discussed
  - "Tetrys, an On-the-Fly Network Coding protocol"
    - To be discussed

## *Future meeting*

- NWCRG will meet during IETF 111
  - for the last time?
- still planning to close the RG mid-2021