Data network traffic: Heavy tails are here to stay!

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Abstract

Packet-level traffic measurements from data networks such as the Internet provide detailed knowledge about the statistical characteristics (e.g., heavy tails, self-similar scaling) of data traffic at the different layers in the hierarchical structure of modern-day networks. In this talk, I illustrate the ubiquitous nature of heavy tails in measured data traffic with a number of examples and argue why these heavy tails are not expected to disappear in the near future, despite the changes that the Internet will undergo.