Modeling Variable Throughput Channels with Stochastic ODEs

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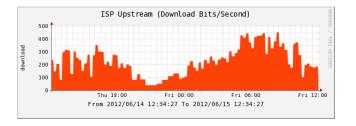
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Introduction

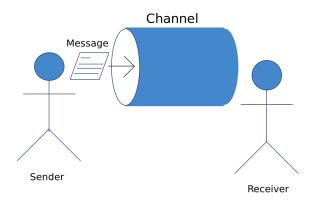


Stochastic differential equations are often used to model the nondeterministic behavior of network channels in computer science.



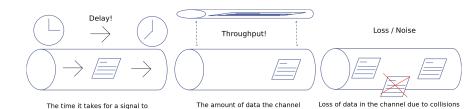
Networking Basics

A **Channel** is the medium through which a message propagates from sender to receiver.



Channel Characteristics

propogate through the channel



can transmit per unit of time

with other signals, environment, etc.

Demonstration

