



Criticisms of modelling packet traffic using long-range dependence (extended version)

R. G. Clegg, R. Landa, M. Rio

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This paper criticises the notion that long-range dependence is an important contributor to the queuing behaviour of real Internet traffic. The idea is questioned in two different ways. Firstly, a class of models used to simulate Internet traffic is shown to have important theoretical flaws. It is shown that this behaviour is inconsistent with the behaviour of real traffic traces. Secondly, the notion that long-range correlations significantly affects the queuing performance of traffic is investigated by destroying those correlations in real traffic traces (by reordering). It is shown that the longer ranges of correlations are not important except in one case with an extremely high load.

Comments: This is an extended version of the conference paper [this http URL](#)

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