

Signatures of Systems and Properties

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In this talk, I will first introduce the concept of signatures of coherent systems and give some examples. I will then describe some of its properties such as stochastic orderings and comparison of different reliability systems. I will then present an extended signature system that would facilitate comparisons of systems of different sizes. Next, I will introduce a new notion of dynamic signatures and describe some of its properties. Finally, I will describe its usefulness in the idea of burning-in systems and examining the cost benefit analysis of different systems.