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## **Evidence for black hole compositeness: Physics of black hole information processing.**

*Tuesday 21 July 2015 11:30 (1 hour)*

We discuss physics of black hole information storage and processing in a quantum portrait according to which black hole is a loose bound-state of many soft gravitons at the quantum critical point, with characteristic Liapunov exponent responsible for the quantum instability and information scrambling. This picture sheds light at the microscopic origin of black hole entropy and also shows that black holes can consistently carry a detectable hair under global symmetry charges, such as baryon number. We discuss some evidence and possible observational consequences of this picture.

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