

ICTS String Seminar

- Title : Page curves in asymptotically flat spacetime
- Speaker : Larus Thorlacius (University of Iceland)
- Date : Monday, June 08, 2020
- Time : 03:00 pm
- Abstract : If black hole evaporation is a unitary process, the entanglement entropy between the outgoing Hawking radiation and the quantum state describing the remaining black hole is expected to follow a so-called Page curve as a function of time. A Page curve for an evaporating black hole in asymptotically flat spacetime can be computed analytically by adapting the Quantum Ryu-Takayanagi (QRT) proposal to a solvable two-dimensional dilaton gravity theory. The associated Page time is found to be one third of the black hole lifetime, at leading order in semi-classical corrections. A Page curve can also be obtained for a semi-classical eternal black hole, where energy loss due to Hawking evaporation is balanced by an incoming energy flux.
- ICTS virtual seminar : Please register at
<https://docs.google.com/forms/d/e/1FAIpQLSf0jLgoqiOgDnxbEBGiuIWiOmh9WX8caH-pr13qDBZOO91lmg/viewform>
(Links to join the seminars will be sent to your registered email address)

Recordings of past talks can be found here:

<https://www.youtube.com/channel/UCw9LdPQ5t7Q7muD0qzn70TA>