The memory effect of Entanglement in 2D CFTs

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日程	:	6 月 24 日（月）16：00−18：00
場所	:	本館 2 階 239 物理学系輪講室

概　要

　We will talk about the memory effect of entanglement entropy of locally excited states in two-dimensional conformal field theories (CFTs). In particular, we consider excited states obtained by acting on a vacuum with primary operators. We show that the entanglement entropy increases by a finite constant amount under its time evolution. Moreover, in rational conformal field theories, we prove that this increase of the (both Renyi and von Neumann) entanglement entropy always coincides with the log of the quantum dimension of the primary operator.　Further, we also show the behavior of the time evolution of Entanglement in 2D quantum gravity and WCFTs. If the time is allowed, we will talk about the recent progress on this object in various deformed field theories.

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