Contribution ID: **10**   Type: **not specified**

Quantum Memories of de Sitter Universe

We show that the S-matrix formulation of the theory as well as the existence of Gibbons-Hawking entropy imply that de Sitter is a state of enhanced memory storage capability and as such is a subject to memory burden effect. Unlike ordinary semi-classical information, the quantum information encoded in the state of de Sitter cannot be erased by inflation and provides a quantum cosmic hair carrying information about the primordial state of the Universe.

Presenter: DVALI, Giorgi (LMU and MPI, Munich and NYU)