2003 Vol. 40 No. 1 pp. 45-47 DOI:

Simultaneous Space and Time Synchronization Using Shared Entangled Qubits LIU Xiao-Shu, ¹ LONG Gui-Lu, ^{1,2,3,4} and TONG Dian-Min⁵

- ¹ Department of Physics, Tsinghua University, Beijing 100084, China
- ² Key Laboratory for Quantum Information and Measurement, Beijing 100084, China
- ³ Center for Atomic and Molecular Nano-Sciences, Tsinghua University, Beijing 100084, China
- ⁴ Institute of Theoretical Physics, the Chinese Academy of Sciences, Beijing 100080, China
- ⁵ Department of Physics, Shandong Normal University, Jinan 250014, China (Received: 2002-12-9; Revised:)

Abstract: This paper generalizes the quantum clock synchronization protocol of Josza, et al., [Richard Jozsa, et al., Phys. Rev. Lett. 85 (2000) 2010] to synchronize space and time simultaneously.

PACS: 03.67.-a, 89.70.+c

Key words: synchronization, entanglement

[Full text: PDF]

Close