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**F. Alberto Grünbaum** and **Takuya Machida\*** (`machida@stat.t.u-tokyo.ac.jp`). *Limit distribution of a 3-period time-dependent quantum walk.*

Quantum walks are quantum analogs of random walks and their long-time limit theorems have been computed since 2002. In my talk, we take care of a discrete-time quantum walk on the line. The quantum walker is operated by time-dependent operators. We present a long-time limit distribution for a 3-period time-dependent quantum walk. The limit distribution shows an interesting behavior which one never has in a time-independent quantum walk or a 2-period time-dependent quantum walk [1,2]. The result in my presentation is based on [3].

[1] N. Konno : Quantum random walks in one dimension, *Quantum Information Processing*, 1(5), pp. 345–354 (2002).

[2] T. Machida and N. Konno : Limit theorem for a time-dependent coined quantum walk on the line, F. Peper et al. (Eds.): *IWNC 2009, Proceedings in Information and Communications Technology*, 2, pp. 226–235 (2010).

[3] F. A. Grünbaum and T. Machida : A limit theorem for a 3-period time-dependent quantum walk, *Quantum Information and Computation*, Vol.15 No.1&2, pp. 50–60 (2015). (Received September 14, 2014)