Abstract Submitted for the MAR12 Meeting of The American Physical Society

Direct Method in Determining the Direction of Action in the Coupling Map Ring WANG-CHUANG KUO, DI LUO, Department of Physics, Natl. Sun Yat-Sen University, Kaohsiung, Taiwan, ROC — Recently, Hung and Hu provided a genuine way to carry binary data on a coupling map ring (CMR) for the chaotic communication (Phys. Rev. Lett., 101, 244102 (2008)). They use the temporal transfer entropy (TTE) to determine the direction of action, which tells bit 1 or 0, between two neighboring chaotic maps of the CMR. A direct method based on the correlation between the changes of two chaotic data is not only capable to resolve the carried bits but more effecient than the scheme of TTE.

Wang-Chuang Kuo Dept of Physics, Natl. Sun Yat-Sen University, Kaohsiung, Taiwan, ROC

Date submitted: 01 Nov 2011

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