Title: Analysis of Statistical Properties of Chaos based Image Encryption by Different Mappings

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Abstract: Chaos mappings attracted a lot of research in recent years because of good properties of chaos maps in terms of continuous broad band power spectrums, sensitivity to initial conditions and similarity to random behavior. Many different scheme and algorithms have proposed in image encryption by chaos maps as well as different mappings. Not only can the structure of algorithm effect on statistical properties of image encryption, but also different chaos maps can, because of different dynamical properties. PWLCM has attracted a lot of research on recent years regarding good dynamical properties. In following sections, the statistical properties of Yoon algorithm [7] will analysis with PWLCM to conclude better statistical properties and better key space.