Extensions of the Wang transform for the pricing of insurance and financial risks *

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(First Version: April 11, 2008)

Abstract. It is well known that the Wang transform [15] for the pricing of financial and insurance risks is derived from Bühlmann's economic premium principle [1]. Recently, some extensions of the Wang transform are proposed, for example, a multivariate extension by Kijima [5] and a extended class of probability transforms by Kijima and Muromachi [9]. In this article we describe the essence of these recent extensions of the Wang transforms and show some special examples related to the Student's t distributions.

Keywords: Bühlmann's economic premium principle, Wang transform, Gaussian copula, non-central t distribution

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