ANOTHER APPROACH TO ASYMPTOTICS AND BOOTSTRAP OF RANDOMLY TRIMMED MEANS

ZHIQIANG CHEN^{1*} AND EVARIST GINÉ^{2**}

¹Department of Mathematics, William Paterson University, Wayne, NJ 07470, U.S.A., e-mail: ChenZ@wpunj.edu ²Department of Mathematics, U-3009, University of Connecticut, Storrs, CT 06269, U.S.A., e-mail: gine@math.uconn.edu

(Received February 17, 2003; revised November 11, 2003)

Abstract. A unified, empirical processes based approach to the central limit theorem and to the bootstrap for randomly trimmed and Winsorized means is developed, with emphasis on Hampel's means.

Key words and phrases: Randomly trimmed means, median absolute deviation.

^{*}Research partially supported by the Center for Research, College of Science and Health, and by the ART program of the William Paterson University.

^{**}Research partially supported by NSF Grant No. DMS-0070382.