You are cordially invited to the 229th meeting as scheduled below.

**Date:**   July 7, 2006 (Fri) 15:00-

**Place:**   RERF Auditorium

**Speaker:** Hirokazu Yanagihara, Ph.D., to be assigned to the Associate Professor, Department of Mathematics, Graduate School of Science, Hiroshima University as of July 1, 2006

**Title:**   “Bias corrections of cross-validation criterion”

**Abstract:**

It is known that the cross-validation (CV) criterion is the second-order unbiased estimator of the risk between the candidate model and the true model. In this talk, we show that the 2k-th higher-order unbiased estimator can be proposed by using a linear combination of the leave-one-out,…, leave-k-out CV criteria. The distinguishing point is that the proposed idea can give a smaller bias than a jackknife method without any analytic calculation. We verify by numerical experiments that the proposed estimator has a smaller bias than other criteria including the generalized information criterion (GIC), the extended information criterion (EIC), the ordinary CV criterion, and so on.