76[K].—R. Doornbos & H. J. Prins, "On slippage tests. I," *Indagationes Mathematicae*, v. 20, 1958, p. 38–46 (*Proc. Kon. Ned. Ak. van Wetensch.*, v. 61, Sec. A, 1958, p. 38–46); "On slippage tests. II," Ibid., p. 47–55; "On slippage tests. III," Ibid., p. 438–447.

The tables, which appear in part III, are related to two of the special cases included in this series of papers. In the first, from each of k Poisson distributions, with means μ_i, a random drawing Z_i is taken ($i = 1, 2, \cdots k$). To test the null hypothesis that $u_i = u, i = 1, \cdots, k$, for which the table is prepared, against the alternate that one of the u_i's is greater than the others which have equal values, the authors propose the statistic, $\max Z_i$. For $k = 2(1)10$ and the sum of the k observations, $n = 2(1)25$, values of $\max Z_i$ are given for which the significance levels are near 5% and 1%. In each case the actual significance levels are given to 3D.

In the second case, each of k objects is ranked by each of m observers. The null hypothesis under test is that each of the m rankings is independently and randomly chosen from the set of permutations of the integers $1, 2, \cdots, k$. As a test against the alternate that one of the objects has a higher probability of being ranked low while the others are ranked in random order, the proposed statistic is $\min S_i$ where S_i is the sum of ranks assigned the i-th object ($i = 1, 2, \cdots, k$). Critical values S_α of $\min S_i$ for significance levels near $\alpha = .05, .025, .01$ are tabled for $m = 3(1)9$ and $k = 2(1)10$. Again in each case true significance levels are shown to 3D.

C. C. Craig

University of Michigan
Ann Arbor, Michigan

77[K].—F. G. Foster, "Upper percentage points of the generalized beta distribution. III," *Biometrika*, v. 45, 1958, p. 492–503.

Let $\theta_{\max}$ denote the greatest root of $| \nu_2 B - (\nu_1 A + \nu_2 B)| = 0$ where A and B are independent estimates, based on ν_1 and ν_2 degrees of freedom, of a parent dispersion matrix of a four-dimensional multinormal distribution. Define

$$I_x(4; p, q) = \Pr(\theta_{\max} \leqq k)$$

with $p = \frac{1}{2}(\nu_2 - 3)$, $q = \frac{1}{2}(\nu_1 - 3)$. Employing methods similar to those used in two preceding papers [1], [2] for the two and three-dimensional cases, the author tabulates 80%, 85%, 90%, 95%, and 99% points of $I_x(4; p, q)$ to 4D for $\nu_1 = 5(2)195$ and $\nu_2 = 4(1)11$.

C. C. Craig

University of Michigan
Ann Arbor, Michigan

1. F. G. Foster & D. H. Rees, "Upper percentage points of the generalized beta distribution. I," *Biometrika*, v. 44, 1957, p. 237–247. [*MTAC*, Rev. 165, v. 12, 1958, p. 302]

2. F. G. Foster, "Upper percentage points of the generalized beta distribution. II," *Biometrika*, v. 44, 1957, p. 441–453. [*MTAC*, Rev. 167, v. 12, 1958, p. 302.]

78[K].—W. Hetz & H. Klinger, "Untersuchungen zur Frage der Verteilung von Objekten auf Plätze," *Metrika*, v. 1, 1958, p. 3–20.

For the classical distribution problem in which k indistinguishable objects are randomly distributed into n distinguishable cells (as in Maxwell-Boltzmann