23[9].—K. Y. CHOONG, D. E. DAYKIN & C. R. RATHBONE, *Regular Continued Fractions for π and γ*, University of Malaya Computer Centre, September 1970. Computer output deposited in the UMT file.

The main table here lists the first 21230 partial quotients a_n in

$$\pi = 3 + \frac{1}{a_1} + \frac{1}{a_2} + \cdots + \frac{1}{a_{21230}} + \cdots .$$

The paper [1] describing this computation appears elsewhere in this issue. This main table is printed on eight sheets of computer paper, with five blocks of ten lines each on each page. The last index n is listed after each block. There follows a statistical table that lists the number of n here such that $a_n = k$ for each $k = 1, 2, 3, \cdots, 2000$. The first missing k is $k = 103$. (An unsolved problem! Who will settle it?)

An earlier computation by R. S. Lehman [2] went to a_{1986}; the tables agree to that limit.* Lehman's discovery,

$$a_{431} = 20776,$$

remains the largest partial quotient up to $n = 21230$ (see Table 2 of [1]). Table 2 of [1] lists all ten $a_n > 2000$ up to 21230. The authors do not comment on the fact that this count of 10 seems a little low, since the Gauss-Kuzmin law predicts

$$\frac{21230 \ln (2002/2001)}{\ln 2} = 15.3$$

for almost all real numbers.

Anyone planning to check or extend this computation could check his output against Table 2 of [1] if the complete table is not available to him.

There is also deposited the first 3470 a_n in

$$\gamma = \frac{1}{a_1} + \frac{1}{a_2} + \cdots + \frac{1}{a_{3470}} + \cdots .$$

Here the largest quotient is $a_{528} = 2076$. Again, a statistical table is given.

The previous computation [3] of γ to a_{371} is not mentioned in [1]; nor is [4], which presumably was the source of the decimal value of γ used.

For a good bibliography up to 1959 see Lehman [2].

D. S.

1. K. Y. CHOONG, D. E. DAYKIN & C. R. RATHBONE, "Rational approximations to π," *Math. Comp.*, v. 25, 1971, pp. 387–392.
2. R. SHERMAN LEHMAN, *A Study of Regular Continued Fractions*, BRL Report 1066, Aberdeen Proving Ground, Maryland, February 1959.
3. DONALD E. KNUTH, "Euler's constant to 1271 places," *Math. Comp.*, v. 16, 1962, pp. 275–281.
4. DURA W. SWEENY, "On the computation of Euler's constant," *Math. Comp.*, v. 17, 1963, pp. 170–178.

* Subsequently, I obtained a copy of the unpublished continued fraction for π to a_{10053} that was computed on the Illiac II in the summer of 1963. This computation was by an NSF project for undergraduates under the direction of Norman T. Hamilton. The partial quotients agree with those deposited here.