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One "Most" and five "More Wanted" numbers were factored on Page 97, all by the Special Number Field Sieve. From the wanted lists issued with Page 95 in November, 2004, CWI factored the "Most Wanted" number 12,218+. Franke factored the "More Wanted" number 6,263+, NFSNET″ factored 11,208+ and 7,254+, Hansen factored 3,436+, and Silverman factored 2,1294L.

One "Smaller-but-Needed" number was factored on Page 97. Cage and Hansen factored 11,236+ by the General Number Field Sieve.

New wanted lists are enclosed.

CWI means Peter Montgomery, Herman te Riele and Willemien Ekkelkamp at the Centrum voor Wiskunde en Informatica in Amsterdam. ECMNET means Paul Zimmermann, Alex Kruppa, Torbjörn Granlund, Michel Quercia, Witold Grabysz, Vilmar Trevisan and many helpers who use the GMP-ECM program of Kruppa and Zimmermann. NFSNET″ is a group of factorers lead by Jeff Gilchrist, Don Leclair, Paul Leyland and Richard Wackerbarth and with contributions from many volunteer workers. See their URL http://www.nfsnet.org . GGNFS is another NFS group, created by Chris Monico. See their URL www.math.ttu.edu/~cmonico/software/ggnfs/ .

Recall that a champion is one of the best two records in its class. Bruce Dodson set two new records for size of prime factor found by the Elliptic Curve Method. He found a P66 factor of 3,466+ and a P62 factor of 2,2034L. Aoki, Kida, Shimoyama and Ueda set a new record for size of number factored by the General Number Field Sieve when they factored the 176-digit cofactor of 11,281+.

The first holes done on Page 97 are in # 5124, # 5136 # 5141, # 5144, # 5155 and # 5157. The only second hole done on Page 97 is in # 5140. The third holes done on Page 97 are in # 5129, # 5149 and # 5166. (Note that # 5149 really was a third hole because the first hole in that table, reported in # 5157, was actually factored before # 5149, but didn't reach me until a few weeks later.) The fourth holes done on Page 97 are in # 5121 and # 5148. The fifth holes done on Page 97 are in # 5126, # 5128, # 5135 and # 5152.

The smallest new factor reported on Page 97 has 39 digits. See # 5156. The largest number factored on Page 97 has 388 digits. (This was the largest composite number in the Cunningham tables.) See # 5125.

See the URL http://www.prothsearch.net/fermat.html for Wilfrid Keller's list of all known Fermat factors.

See the URL http://www.utm.edu/research/primes/largest.html for Chris Caldwell's list of all of the largest known Mersenne primes.

See the URL http://www.cerias.purdue.edu/homes/ssw/cun/index.html for the online Cunningham book. The full text is available at the AMS web site: http://www.ams.org/online_bks/conm22 .

If your address is wrong, please tell me.

Keep the factors coming!

Sam Wagstaff