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Three “Most” and four “More Wanted” numbers were factored on Page 98. Using programs of Franke and CWI, as well as his own programs, Kruppa factored the “Most Wanted” numbers 3,424+ and 7,253–, both by the Special Number Field Sieve. Cage and Hansen used their programs and those of CWI to factor the “Most Wanted” number 3,437– by the SNFS. Aoki use the Elliptic Curve Method to find a prime factor of the “More Wanted” number 2,751+, leaving a 166-digit composite cofactor. Three other “More Wanted” numbers were factored by SNFS. Silverman factored 2,737+, Kruppa factored 11,217– and NFSNET” factored 11,212+,

Two “Smaller-but-Needed” number were factored on Page 98, both by the General Number Field Sieve. Leyland factored 6,786L and Irvine factored 5,328+.

Updated 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 Grabys, 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>.

There were no new champions for factoring Cunningham numbers on this page. Recall that a champion is one of the best two records in its class. A list of recent champions is enclosed.

The first holes done on Page 98 are in # 5181, # 5205 # 5215, # 5220 and # 5222. The only second hole done on Page 98 is in # 5204. No third holes were done on Page 98. The fourth holes done on Page 98 are in # 5177, # 5192 and # 5219. The only fifth hole done on Page 98 is in # 5193.

The smallest new factor reported on Page 98 has 38 digits. See # 5199 and # 5213. The largest number factored on Page 98 has 342 digits. See # 5201.

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