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Several "Wanted" numbers were factored on Page 94. From the wanted lists issued with Page 92 in January, 2004, NFSNET″ factored the "Most Wanted" number 10,223+ and Bob Silverman factored the "Most Wanted" number 2,661+, both by the Special Number Field Sieve. Takeshi Shimoyama found a 50-digit factor of the "Most Wanted" number 6,257+ by the Elliptic Curve Method, leaving a 151-digit composite cofactor which remains "Most Wanted."

NFSNET″ factored the "More Wanted" number 11,206+ and Sean Irvine factored the "More Wanted" numbers 2,1238M and 2,1262M, all by SNFS.

One "Smaller-but-Needed" number was factored on Page 94. Leyland, Kleinjung, Franke, and CWI factored 11,473M by the General Number Field Sieve.

New wanted lists are enclosed. They were prepared by J. L. Selfridge.

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` .

There was one new champion for factoring Cunningham numbers on this page. Recall that a champion is one of the best two records in its class. The factorization of the C239 of 2,811− was a new champion (second place) for SNFS by SNFS difficulty.

The first holes done on Page 94 are in # 4988, # 4989 and # 5013. The second holes done on Page 94 are in # 4999 and # 5000. The only third hole done on Page 94 is in # 5009. The fourth holes done on Page 94 are in # 4991 and # 4992. No fifth hole was done on Page 94.

The smallest new factor reported on Page 94 has 35 digits. See # 5015. The largest number factored on Page 94 has 252 digits. The one in # 5007 is slightly greater than the one in # 5017.

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 changes, please tell me.

Keep the factors coming!

Sam Wagstaff