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Six "Most Wanted" numbers from the wanted lists issued with Page 126 were factored on Page 127. Propper factored 3,599+ by the Elliptic Curve Method. He also factored 7,337−, 5,409+, 10,289+ and 11,272+ by the Special Number Field Sieve. Dodson found a small factor of 2,961+ by ECM and Batalov finished the composite cofactor by the General Number Field Sieve.

One "More Wanted" number from the wanted lists issued with Page 126 was factored on Page 127. Dodson found a small factor of 5,421+ by ECM, leaving a 180-digit composite cofactor.

One "Smaller-but-Needed" number was factored on Page 127. Bai and Wagstaff factored 2,2090M by GNFS.

New wanted lists are enclosed.

A Base 3 extension has been added to the regular tables.

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. NFS@Home is a group led by Greg Childers.

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 C212 of 10,770M split in # 6216 was a new champion (first place) for the General Number Field Sieve. A list of recent champions is enclosed.

The first holes factored on Page 127 are in # 6211, # 6231, # 6233, # 6234 and # 6236. The second holes factored on Page 127 are in # 6229, # 6230 and # 6235. No third, fourth or fifth holes were factored on Page 127.

The smallest new factor reported on Page 127 has 60 digits. See # 6227. The largest number factored on Page 127 has 281 digits. See # 6227.

Propper factored 7,337− C213 and 11,272+ C201, which were the last two Cunningham numbers $b^n \pm 1$ with $b^n < 10^{285}$.

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

No new Mersenne primes have been found since the last page. The current largest known prime is $2^{57885161} − 1$. See the URL http://primes.utm.edu/primes/ for Chris Caldwell's database of the largest known primes (updated hourly).

See the URL http://homes.cerias.purdue.edu/~ssw/cun/index.html for the online Cunningham book. The full text is available as an ebook at: http://www.ams.org/publications/ebooks/ebooks .

Please send me any address changes.

Keep the factors coming!

Sam Wagstaff