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Two "Most Wanted" numbers from the wanted lists issued with Page 129 was factored on Page 130. Propper factored 12,269− by the Special Number Field Sieve. Bos, Kleinjung and A Lenstra factored 2,1117− by Coppersmith's "Factorization Factory" variation of SNFS .

No "More Wanted" numbers from the wanted lists issued with Page 129 were factored on Page 130.

One "Smaller-but-Needed" number was factored on Page 130. NFS@Home factored 2,2590L by the General Number Field Sieve.

New wanted lists are enclosed. The number 2,991− is not on the new lists because it was just factored and will appear as the first number on Page 131.

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 were four new champions for factoring Cunningham numbers on this page. Recall that a champion is one of the best two records in its class. The number 2,1117− C332 in # 6309 was the champion (second place) for the Special Number Field Sieve by size. It was replaced by the C342 of 2,1171− in # 6315. The latter number is the new champion (second place) for the Special Number Field Sieve by difficulty. The number 3,697+ C221 in # 6319 (and # 6320) is the new champion (first place) for the General Number Field Sieve by size. A list of recent champions is enclosed.

The only first hole factored on Page 130 is in # 6318. The second holes factored on Page 130 are in # 6309, # 6312, # 6314 and # 6315. The third holes factored on Page 130 are in # 6307, # 6308, # 6310 and # 6328. The only fourth hole factored on Page 130 is in # 6306. The fifth holes factored on Page 130 are in # 6311, # 6313 and # 6317.

The smallest new factor reported on Page 130 has 62 digits. See # 6326. The largest number factored on Page 130 has 342 digits. See # 6315.

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