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Three "Most Wanted" numbers from the wanted lists issued with Page 121 were factored on Page 122. NFS@Home factored 7,323+ and 10,274+, both by the Special Number Field Sieve. Batalov and Dodson factored 10,277+ by SNFS.

Three "More Wanted" numbers from the wanted lists issued with Page 121 were factored on Page 122. NFS@Home factored 2,1814M, 11,263+ and 2,1822M by SNFS.

Two "Smaller-but-Needed" numbers were factored on Page 122. Sisti factored 5,459− by SNFS. Batalov and Dodson factored 5,457− by the General Number Field Sieve.

New wanted lists are enclosed.

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 three new champions for factoring Cunningham numbers on this page. Recall that a champion is one of the best two records in its class. The C197 of 2,1196+ split in # 6054 was a new champion for the General Number Field Sieve by size. The C299 of 2,1031− split in # 6064 was a new champion (second place) for SNFS both by size and by SNFS difficulty. A list of recent champions is enclosed.

The first holes done on Page 122 are in # 6053, # 6062, # 6070, # 6075, # 6076 and # 6079. The only second hole done on Page 122 is in # 6065. The only third hole done on Page 122 is in # 6078. The fourth holes done on Page 122 are in # 6060 and # 6073. The only fifth hole done on Page 122 is in # 6052.

The smallest new factor reported on Page 122 has 56 digits. See # 6061. The largest number factored on Page 122 has 299 digits. See # 6064.

See the URL http://www.prothsearch.net/fermat.html for Wilfrid Keller's list of all known Fermat factors. Recently, new factors were found for F_m with $m = 221670, 3335, 226614$ and 2141872.

No new Mersenne primes have been found since the last page. The current largest known prime is $2^{43112609} - 1$. See the URL http://primes.utm.edu/primes/ for Chris Caldwell's database of the largest known primes (updated hourly).

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

Please send me any address changes.

Keep the factors coming!

Sam Wagstaff