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Two “Most Wanted” numbers from the wanted lists issued with Page 137 were factored on Page 138. NFS@Home factored 5,454+ and 7,376+, both by the Special Number Field Sieve.

Three “More Wanted” numbers from the wanted lists issued with Page 137 were factored on Page 138. NFS@Home factored 2,2126M and 2,1076+, both by the SNFS. Wagstaff factored 5,493– by the Elliptic Curve Method.

One “Smaller-but-Needed” number from the wanted lists issued with Page 137 was factored on Page 138. Kurt Beschorner factored 10,337– by the General Number Field Sieve. The “Smaller-but-Needed” number 2,2390M created on Page 138 was factored by mersenneforum, also by the GNFS.

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 no new champions for factoring Cunningham numbers on this page. A list of recent champions is enclosed.

The first holes factored on Page 138 are in # 6552, # 6558, # 6560, # 6561 and # 6563. The only second hole factored on Page 138 is in # 6567. No third or fourth hole was factored on Page 138. The fifth holes factored on Page 138 are in # 6556 and # 6568.

The smallest new factor reported on Page 138 has 57 digits. See # 6544 and # 6550. The largest number factored on Page 138 has 357 digits. See # 6544.

See the URL <http://www.prothsearch.net/fermat.html> for a list of all known Fermat factors. Several new factors were found since the last page.

No new Mersenne prime was found since the last page. The current largest known prime is $2^{82589933} - 1$. 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.

Please send me any address changes.

Keep the factors coming!

Sam Wagstaff