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Six "Most Wanted" numbers from the wanted lists issued with Page 138 were factored on Page 139. NFS@Home factored 3,667−, 3,668+, 5,457+, 6,409+, 11,307− and 11,307+, all by the Special Number Field Sieve.

Five "More Wanted" numbers from the wanted lists issued with Page 138 were factored on Page 139. NFS@Home factored 2,2158L, 2,1084+, 5,458+, 7,379+ and 12,305+, all by the SNFS.

No "Smaller-but-Needed" number from the wanted lists issued with Page 138 was factored on Page 139.

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 139 are in # 6577, # 6578, # 6579, # 6580, # 6581, # 6582, # 6585, # 6587, # 6590, # 6591, # 6595, # 6598, # 6600, # 6601 and # 6604. The only second hole factored on Page 139 is in # 6586. The only fourth hole factored on Page 139 is in # 6575. No third or fifth hole was factored on Page 139.

The smallest new factor reported on Page 139 has 61 digits. See # 6593. The largest number factored on Page 139 has 390 digits. See # 6597.

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