Department of Computer Sciences
Purdue University
West Lafayette, IN 47907
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Five "Most Wanted" numbers from the wanted lists issued with Page 115 were factored on Page 116. NFS@Home factored 2,899−, 10,271− and 11,254+, all by the Special Number Field Sieve. With help from Gilchrist, NFS@Home factored 7,314+, also by the SNFS. Edwards and King factored 5,382+ by the General NFS.

Six "More Wanted" numbers from the wanted lists issued with Page 115 was factored on Page 116. NFS@Home factored 2,1718L, 2,1718M, 2,1754M, 5,383− and 11,257−, all by SNFS. Raman factored 10,275+ by SNFS.

Six "Smaller-but-Needed" numbers were factored on Page 116. Batalov and Dodson factored 10,308+, 2,1970L, 5,442+ and 11,561M. Bonenberger and Krone factored 7,721L and 5,785L. All six were done by the General NFS.

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 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 P73 of 2,1163− shown in # 5888 is the new champion (second place) for the Elliptic Curve Method. A list of recent champions is enclosed.

The first holes done on Page 116 are in # 5863, # 5864, # 5869, # 5870, # 5871, # 5878, # 5879, # 5880, # 5882, # 5884, # 5885, # 5886 and # 5890. No second holes were done on Page 116. The third holes done on Page 116 are in # 5860 and # 5865. The fourth holes done on Page 116 are in # 5873, # 5876, # 5877 and # 5883. No fifth holes were done on Page 116.

The smallest new factor reported on Page 116 has 55 digits. See # 5867. The largest number factored on Page 116 has 318 digits. See # 5888.

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

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 is available at the AMS web site: http://www.ams.org/online_bks/conm22 .

Please send me any address changes.

Keep the factors coming!

Sam Wagstaff