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ANNOUNCEMENTS

1) Professor Tanguy RIVOAL of FRANCE has been elected as an HONORARY FELLOW of the HARDY-RAMANUJAN SOCIETY for the following improvement on the work of (late) Professor Roger APERY.

THEOREM 1. *For every $\epsilon > 0$, there exists a positive integer $N(\epsilon)$, such that if $n > N(\epsilon)$,*

$$dim_Q(Q + Q\zeta(3) + \ldots + Q\zeta(2n-1) + Q\zeta(2n+1)) \geq (1-\epsilon)(1+\log 2)^{-1}\log n.$$

THEOREM 2. *There exists an odd integer j with $5 \leq j \leq 169$ such that*

$$1, \zeta(3), \zeta(j)$$

are linearly independent over Q.

2) Professor T.P.PENEVA of JAPAN has been awarded the distinguished award of the HARDY-RAMANUJAN SOCIETY for the following work by her.

THEOREM. *Let $\frac{1}{3} + \frac{1}{100} \leq \theta \leq 1$. Also let $E(X)$ denote the number of even numbers $2n$ satisfying $6 \leq 2n \leq X$, but $2n$ can not be expressed as a sum of two primes. Then*

$$E(X + X^{\theta}) - E(X) \leq CX^{\theta-\delta}$$

where $C > 0$ and $\delta > 0$ are some absolute constants.

3) The following result by Professor Michele ELIA of ITALY deserves to be widely known. *The equation*

$$x = \sqrt{a + \sqrt{a + \sqrt{a + \sqrt{a + \sqrt{a + x}}}}}$$

where a is a transcendental number, cannot be solved completely in terms of radicals. This has relevance to a result of S.RAMANUJAN where he solves the equation completely in radicals if the number of square root signs is 3 or 4 in place of 5. The reference to the paper by Professor Michele ELIA is: Observations on some algebraic equations associated with Ramanujan's work, to appear in the proceedings of an International Conference in number theory and discrete mathematics in Honour of Srinivasa Ramanujan, Oct 2-6, 2000, CHANDIGARH, INDIA.