Meeting: 1005, Newark, Delaware, SS 5A, Special Session on Designs, Codes, and Geometries

1005-05-36Xiang-dong Hou* (xhou@math.usf.edu), Department of Mathematics, University of South
Florida, Tampa, FL 33620-5700. On the Asymptotic Number of Inequivalent Binary Self-Dual
Codes.

Let Ψ_n be the number of inequivalent self-dual codes in \mathbb{F}_2^{2n} . We prove that $\lim_{n\to\infty} \frac{(2n)!}{\tau} 2^{-\frac{1}{2}n(n-1)} \Psi_n = 1$, where $\tau = \prod_{j=1}^{\infty} (1+2^{-j}) \approx 2.38423$. (Received January 17, 2005)