1052-11-5   **Robertc C Vaughan*** (rvaughan@math.psu.edu), Mathematics Department, Penn State University, McAllister Building, University Park, PA 16802. *Diophantine approximation to curves and surfaces.*

The metrical theory of diophantine approximation has a long and distinguished history, beginning with Khinchin's celebrated theorem that almost no, or almost all, real numbers α have infinitely many rational approximations of the form $|\alpha - a/q| \leq q^{-1}\psi(q)$, with $\psi(q)$ a positive decreasing function, according as

$$\sum_{q=1}^{\infty} \psi(q)$$

converges or diverges. There are many variants of this question and there have been a number of recent developments. In this talk we will give an historical overview and describe some of the recent developments. (Received August 27, 2009)

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