

Title: A function which has Vanishing Mean Oscillation on the unit circle but is not essentially bounded.

Abstract: It is known that if  $BMO$  is the space of all functions on the unit circle  $\mathbb{T}$  having bounded mean oscillation, then  $L^\infty(\mathbb{T}) \subseteq BMO$ . One can then ask if the same is true for  $VMO$ , the subspace of functions in  $BMO$  that have vanishing mean oscillation. In this talk, we will construct an example of a function  $G$  with  $G \in VMO$  but  $G \notin L^\infty(\mathbb{T})$ .