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Yong Zhang* (zhangy@cc.umanitoba.ca), Department of Mathematics, University of Manitoba, Winnipeg, MB R3T 2N2, Canada. *Approximate amenability of Beurling algebras.*

Whether or not there is a weight function ω on a locally compact group G such that the Beurling algebra $L^1(G, \omega)$ is approximately amenable but not amenable is an open problem. In this talk I will prove that for any weight function ω on a discrete group G , if $L^1(G, \omega)$ (which is really $\ell^1(G, \omega)$) is approximately amenable then it is already amenable. In fact, the result remains true if G is an [IN] group.

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