

1155-42-338

Eyvindur A. Palsson and **Sean R. Sovine*** (sovine5@gmail.com), 460 McBryde Hall, Virginia Tech, 225 Stanger Street, Blacksburg, VA 24061-1026. *The Triangle Averaging Operator in Higher Dimensions.*

Greenleaf and Iosevich introduced the bilinear operator that averages a pair of functions over the set of equilateral triangles in the plane with one vertex at a given point. We study the generalization of this operator that applies to functions on higher dimensional Euclidean space. We obtain non-trivial L_p bounds for this operator. (Received January 18, 2020)