

1067-35-479

Alexander L Volberg* (sashavolberg@yahoo.com), Dept of Math., MSU, East Lansing, MI 48824. *Weak and strong weighted norm of any Calderon–Zygmund operator are equivalent.*

In this joint paper with Carlos Perez and Sergei Treil we prove that the norm of any Calderon–Zygmund operator on a weighted space can be tested by its norm (and the norm of the adjoint operator) on characteristic functions of cubes. This is a T1 theorem in the presence of A2 weight. From this result we derive a corollary that the strong weighted and the weak weighted norms are “equivalent” for any Calderon–Zygmund operator. Based on our main result Tuomas Hytonen proved a so-called A2 conjecture. Jointly (Tuomas Hytonen, Carlos Perez, Sergei Treil, Alexander Volberg) we get yet another—may be a bit simpler—proof. (Received September 06, 2010)