Improved Bounds for the Union of Fat Triangles.

Esther Ezra

NYU

We show that, for any fixed $\delta > 0$, the combinatorial complexity of the union of n triangles in the plane, each of whose angles is at least δ, is $O(n2^{\alpha(n)}\log^* n)$, with constant of proportionality depending on δ. This considerably improves the twenty-year-old bound $O(n\log\log n)$, due to Matousek etal.

Joint work with Boris Aronov and Micha Sharir.

For more information please visit the seminar website at:
http://www.math.nyu.edu/seminars/geometry_seminar.html.