On the dimension of diagonally affine self-affine sets and overlaps.

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We consider self-affine IFS on the plane of the form $f_i(x)=A_ix+t_i$, i=1,...,m, where the matrices A_i are diagonal matrices of norm smaller than one. We combine methods of Hochman with the Ledrappier-Young formula to compute the dimensions of the corresponding self-affine set and sel-affine measures.

Joint work with Balazs Barany and Michal Rams.