1085-81-75 Alexander Elgart* (aelgart@vt.edu), Mira Shamis and Sasha Sodin. Localization for non-monotone discrete Schrodinger operators.

We study a class of random Schrodinger operators with sign-indefinite potentials, in the strong disorder regime.

We prove regularity of the density of states and Anderson localization using a modification of the Aizenman-Molchanov fractional moment method. A particular example of the class of systems covered by our results is the discrete alloy-type Anderson model. (Received August 30, 2012)