

1154-28-1219 **Dmitriy Bilyk*** (dbilyk@math.umn.edu). *Discreteness of minimizing measures.*

The phenomenon of clustering of minimizing measures is often observed theoretically, numerically, or experimentally: in many situations, in particular for some attractive-repulsive potentials, the minimizers of the energy integral happen to be discrete or supported on very thin sets. We will discuss several manifestations of this phenomenon on the sphere and on projective spaces, in relation to the p-frame energies and other energies arising from problems of discrete geometry. The talk is based on joint work with A. Glazyrin, R. Matzke, J. Park, A. Vlasiuk. (Received September 14, 2019)