1053-26-288 Almut Burchard* (almut@math.utoronto.ca). Stability of the rearrangement inequality for the Coulomb energy.

It is well-known that the Coulomb energy of a (positive) charge distribution increases, if the distribution is rearranged to be symmetric decreasing. One may ask if a charge distribution whose Coulomb energy is close that of its rearrangement must already be close to symmetric about some point? I will present a simple stability result on the Coulomb energy and sketch its proof. (Joint work with Gregory Chambers, greg.chambers@utoronto.ca) (Received September 07, 2009)