1057-46-379 Almut Burchard\* (almut@math.toronto.edu), Department of Mathematics, 40 St. George Street, 6th Floor, Toronto, ON. "On Stability of the rearrangement inequality for the Coulomb energy".

It is well known that the Coulomb energy of a (positive) charge distribution will increase, 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. (Received January 26, 2010)