962-30-763   **Albert Baernstein II** (`al@math.wustl.edu`), Department of Mathematics, Washington University, St. Louis, Missouri 63130. *Some comparison problems for harmonic measure in the plane* Preliminary report.

Let Ω be a circularly symmetric plane domain which contains the origin, and let Ω_1 be its radial symmetrization in the sense of M. Marcus. For $R > 0$, let $\omega_1(R)$ be the harmonic measure at the origin of the circle $|z| = R$ with respect to the part of Ω inside the disk $|z| < R$, and let $\omega_1(R)$ be the corresponding harmonic measure when Ω is replaced by Ω_1. Is it always true that $\omega(R) \leq \omega_1(R)$? In this talk I will discuss the status of this and some related problems which have been the subject of recent work, notably by A. Pruss. (Received September 25, 2000)