1003-30-544   **Dmitry Khavinson*** (`dmitry@uark.edu`), Department of Mathematics, University of Arkansas, Fayetteville, AR 72701, and **Genevra Neumann**. *On a Maximmal Number of Zeros of Rational Harmonic Functions.* Preliminary report.

We shall show that the maximum number of zeros of complex harmonic functions $\bar{z} - r(z)$, where $r(z)$ is a rational function of degree $n, n > 1$, is at most $5n - 5$. We also show how this result applies to certain computational problems in gravitational microlensing. (Received September 21, 2004)