Craig A. Nolder* (nolder@math.fsu.edu), Department of Mathematics, Florida State University, Tallahassee, FL 32306. Monogenic functions and systems of conjugate harmonic functions. Preliminary report.

We study systems of conjugate harmonic functions which arise as the even or odd components of monogenic functions under a Dirac operator. Stein-Weiss systems are a special case.

Results are generalizations from analytic and harmonic function theory including $L^p$-integrability, Lipschitz continuity, nontangential limits, area integrals and $H^p$-spaces. (Received September 05, 2006)