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Qingchun Ji and **Ke Zhu*** (ke.zhu@mnsu.edu). *Solvability of Dirac type equations and automatic transversality of holomorphic curves*. Preliminary report.

We develop a weighted L^2 -method for the (half)-Dirac equation. For Dirac bundles over Riemann surfaces, we give a sufficient condition for the solvability of the Dirac equation in terms of a curvature integral. Applying this to the Dolbeault-Dirac operator, we establish an automatic transversality criteria for holomorphic curves in Kahler manifolds. This is a joint work with Qingchun Ji. (Received August 29, 2016)