1131-58-117Nicolae Anghel* (anghel@unt.edu), 1155 Union Circle # 311430, Denton, TX 76203.Fredholmness vs. Spectral Discreteness for First Order Differential Operators.

In this talk it is shown that for essentially self-adjoint first-order differential operators D, acting on sections of bundles over complete (non-compact) manifolds, Fredholmness vs. Spectral Discreteness is the same as ' $\exists c > 0$, D is c-invertible at infinity' vs. ' $\forall c > 0$, D is c-invertible at infinity'. An application involving the spectral theory of electromagnetic Dirac operators is then given. (Received July 09, 2017)