

A UNIFORM BANACH FIXED POINT THEOREM IN SOLVING NON-LINEAR PDES

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ABSTRACT. In this talk we study non-linear PDEs of the type $F(X, 1) = 0$, consider suitable deformations $F(x, t) = 0$ with a solution for $F(X, 0) = 0$ and establish a version of the continuity method by means of a uniform Banach fixed point theorem.