$C^2 \Rightarrow$ modulus of cty conditions hold!

Modification of Lemma 11.2.10.

Lemma: Let T be a compact subset of $\mathbb{R}^n$ and let D be a compact subset of $\mathbb{R}^k$.

Let $h: T \to \mathbb{R}^{n+k}$ be with prob Π C^1 cond'tion on densities.

then $\mathbb{P}(h^{-1}(D) = \emptyset) = 1$

Prof: Same till after 11.2.28.

Then define $A = \{\exists t \in T: h(t) \in D\}$,

$A_{nj}: \{\exists t \in B_{nj} : h(t) \in D\}$

Then (11.2.29) holds.

Let t_{nj}: center of B_{nj}. Then under A_{nj}, E_ε