Now 11.2.30 can upper bound as for 11.2.28 and similarly lower bound

from which you get the limit.

~~Det~~

→ ~~Set~~ $t^* \in B_{mj}$: $\det(\nabla f(t^*)) = 0$

$$|\nabla f(t_{mk}) - \nabla f(t^*)|$$

$$|\det \nabla f(t_{mk})| \leq C_N (\max(1, C_\varepsilon))^{N-1} \omega_\varepsilon(\sqrt{N} \operatorname{diam}(B_{mj}))$$

sum over ~~$1 \leq j \leq N$~~ !

~~$1 \leq i, j \leq k B_m$~~

~~$1 \leq i, j$~~ $1 \leq i \leq N$

~~$1 \leq j$~~ $j = 0$

~~$|f_i$~~

$$|f_j^i(t_{mk}) - f_j^i(t^*)|$$

$$\leq \sup_{t, s \in B_{mj}} |f_j^i(s) - f_j^i(t)|$$

each term has N terms

$$\leq \omega_{f_j^i}(\sqrt{N} \operatorname{diam}(B_{mj}))$$

$$\leq \omega_\varepsilon(\sqrt{N} \operatorname{diam}(B_{mj}))$$

as on E_ε.

Just bound ~~first~~ $N-1$ terms (in each N term product) by C_ε and the rest by the above then done!

PTO