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Quasi-analytic smooth functions on $\mathbb{R}$

Definition. Definition

Let $\{M_n\} \in (0, \infty)^{\mathbb{N}}$ be a sequence of positive real numbers. Then

$$\mathcal{C}^\infty(U)_{\lesssim M} := \left\{ f \in \mathcal{C}^\infty(U) \mid \forall n \in \mathbb{N}, \|f^{(n)}\|_\infty \leq \beta_f B_f^n M_n \right\}$$

The class $\mathcal{C}^\infty(U)_{\lesssim M}$ is said to be **quasi-analytic** if

$$f \in \mathcal{C}^\infty(U)_{\lesssim M}, p \in U, f^{(n)}(p) = 0 \implies f \equiv 0 \text{ on } U$$

Current note has 0 direct children and 0 total descendants.

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And it has 39 siblings.

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