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lecture: Wermer type sets and extension of CR functions

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Abstract: For each  $n \in \mathbb{N}$ ,  $n \geq 2$ , we construct an unbounded closed pseudoconcave complete plurupolar set  $\mathcal{E} \subset \mathbb{C}^n$  which contains no analytic variety of positive dimension (we call it a Wermer type set). We also construct an unbounded strictly pseudoconvex domain  $\Omega \subset \mathbb{C}^n$  and a smooth CR function f on  $\partial\Omega$  which has a single-valued holomorphic extension exactly to the set  $\overline{\Omega} \setminus \mathcal{E}$ .