We exhibit a large class of hermitian scalar field theories satisfying the Wightman axioms. For each $d > 0$, and each polynomial P, we exhibit a collection of theories which are loosely but legitimately based on a $P(\varphi)$ interaction in d space dimensions. One of the features of the construction is that the Wightman n-point function of each theory is a sum of finitely many integrals associated with "Feynman-like" graphs. Thus, it is in closed form.

Reviewer: C.J.Read (Cambridge)

MSC:

46N50	Applications of functional analysis in quantum physics
81T08	Constructive quantum field theory
81T10	Model quantum field theories

Cited in **1** Review
Cited in **4** Documents

Keywords:

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