NOTATION

The following notation is frequently used without explanation in the text.

$\bar{A}$ = closure of a subset A (usually in a Euclidean space)

$B \sim A$ = $\{x \in B : x \notin A\}$

χ_A = characteristic function of A

$\underline{\underline{1}}_A$ = identity map $A \to A$

$\mathcal{L}^n$ = Lebesgue measure in $\mathbb{R}^n$

$B_\rho(x)$ = open(*) ball with centre x radius ρ

$\bar{B}_\rho(x)$ = closed ball ;

(If we wish to emphasize that these balls are in the balls in $\mathbb{R}^P$, we write $B^P_\rho(x)$, $\bar{B}^P_\rho(x)$.)

ω_n = $\mathcal{L}^n(B_1(0))$

$\eta_{x,\lambda} : \mathbb{R}^P \to \mathbb{R}^P$

(for $\lambda > 0$, $x \in \mathbb{R}^P$) is defined by $\eta_{x,\lambda}(y) = \lambda^{-1}(y-x)$; thus $\eta_{x,1}$ is translation $y \mapsto y-x$, and $\eta_{0,\lambda}$ is homothety $y \mapsto \lambda^{-1}y$)

$W \subset\subset U$ (U an open subset of $\mathbb{R}^P$)

shall always mean that W is *open* and $\bar{W}$ is a compact subset of U .

$C^k(U,V)$ (U,V open subsets of finite dimensional vector spaces) denotes the space of C^k maps from U into V .

$C^k_c(U,V) = \{\phi \in C^k(U,V) : \phi$ has compact support$\}$.

(*) In Chapter 1 $B_\rho(x)$ denotes the *closed* ball.