??
??
??
$X =$
$(x_1, ..., x_{n+1})$
$f(x_1) \leq$
$f((x_2) \leq$
$\cdots \leq$
$f(x_{n+1})$
x_0
$(x_1, ..., x_{n+1})$
x_r
$x_r =$
$x_0 +$
$\alpha(x_0 -$
$x_{n+1})$
(Reflecção)
$f(f(x_1) <$
$f(x_r) <$
$f(x_n)$
$x_{n+1} \leftarrow$
x_r
(Expansão)
$f(f(x_r) <$
$f(x_1)$
$x_e =$
$x_0 +$
$\gamma(x_r -$
$x_0)$
$f(x_e) <$
$f(x_r)$
$x_n \leftarrow$
x_e
$x_n \leftarrow$
x_r
(Con-
tração)
$x_c =$
$x_0 +$
$\rho(x_{n+1} -$
$x_0)$
$f(x_c) <$
$f(x_{n+1})$
$x_{n+1} \leftarrow$
x_c
(En-
col-
hi-
mento)
$x_i \leftarrow$
$x_1 +$
$\sigma(x_i -$
$x_1), i =$
$2 \ldots n +$
1
?
Mesh
Adap-
ta-
tive
k_s
Search
Poll
$f(x) <$
$f(x_k)$
x_k
$M_k =$
$\{x +$
$\Delta_k^m Dz :$
$x \in$
$V_k, z \in$
$N^{nD}\} \subset$
R^n
M_k
x
Δ_k^m
D
$R^{n \times n_D}$
n_D
R^n
$[I_n -$
$I_n]$
I_n
n
SEARCH
Sur-
ro-
gate
lib
POLL
k_p
$P_k =$
$\{x_k +$
$\Delta_k^p d :$