```
1: for i = \{1, ..., n\} do

2: \mid \mathcal{B} \leftarrow \text{SUBDIVIDE}(\mathcal{B})

3: \mid \mathcal{B} \leftarrow \mathcal{B} \cap f(\mathcal{B})

4: return \mathcal{B}
```

```
1 function relative_attractor(t, f, X, steps)
2 dim = t.dim; hit = 1; sd = 8; tic;
3 for s = 1:steps,
       t.set_flags('all', sd);
5
       t.subdivide(sd);
       b = t.boxes(-1); N = size(b,2);
6
7
       S = whos('X'); l = floor(5e7/S.bytes);
8
       for k = 0:floor(N/l),
9
           K = k*l+1:min((k+1)*l,N);
10
           c = b(1:dim,K);
           r = b(dim+1:2*dim,1);
11
12
           n = size(c,2); E = ones(n,1);
13
           P = kron(E,X)*diag(r) + ...
               kron(c',ones(size(X,1),1));
14
15
           t.set_flags(f(P)', hit);
       end
16
17
       t.remove(hit);
18
       fprintf(...
19
           'depth %d, %d boxes, %.1f sec\n',...
20
           t.depth,t.count(-1),toc...
21
       );
22 end
```

```
function unstable_set(f::BoxMap, B::BoxSet)
for s in 1:steps
B = subivide(B)
B = B ∩ f(B)
end
return B
end
end
```