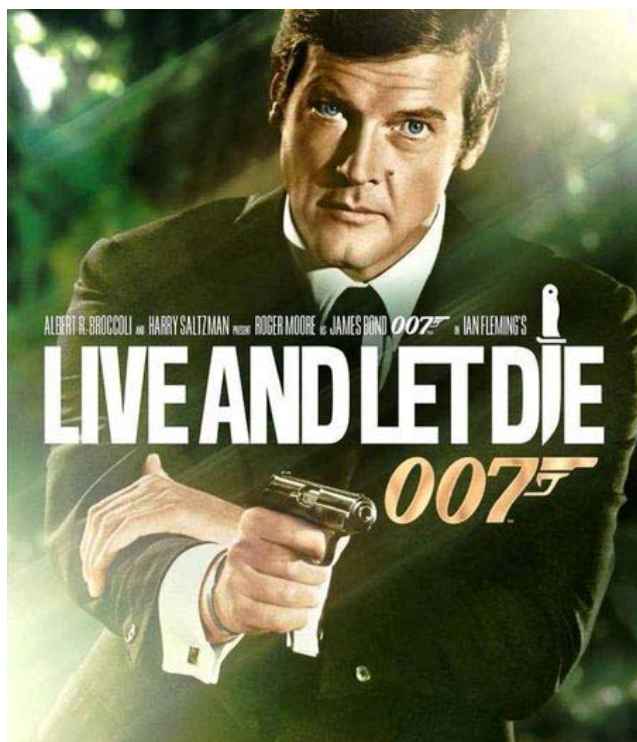
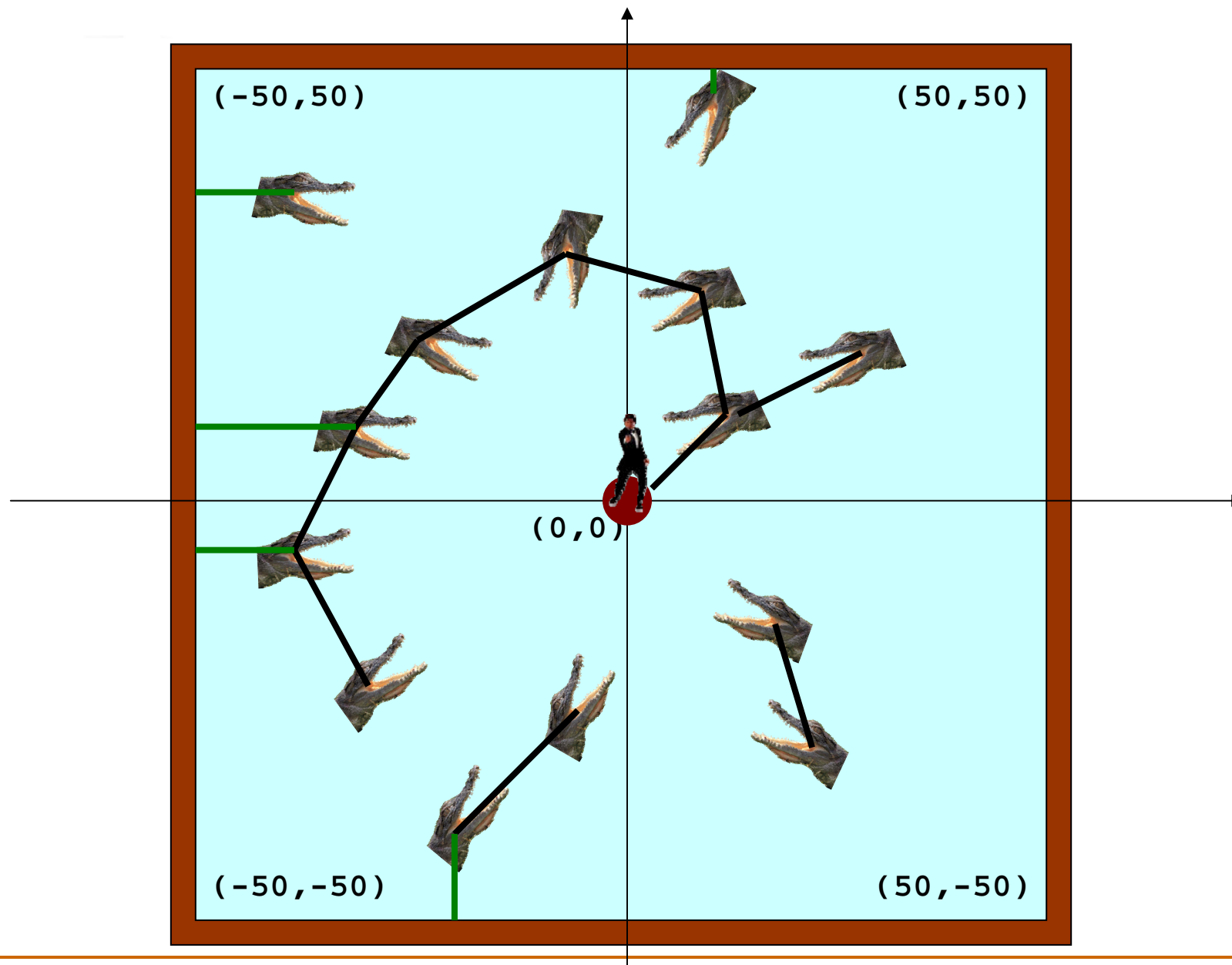


第六讲 图（上）

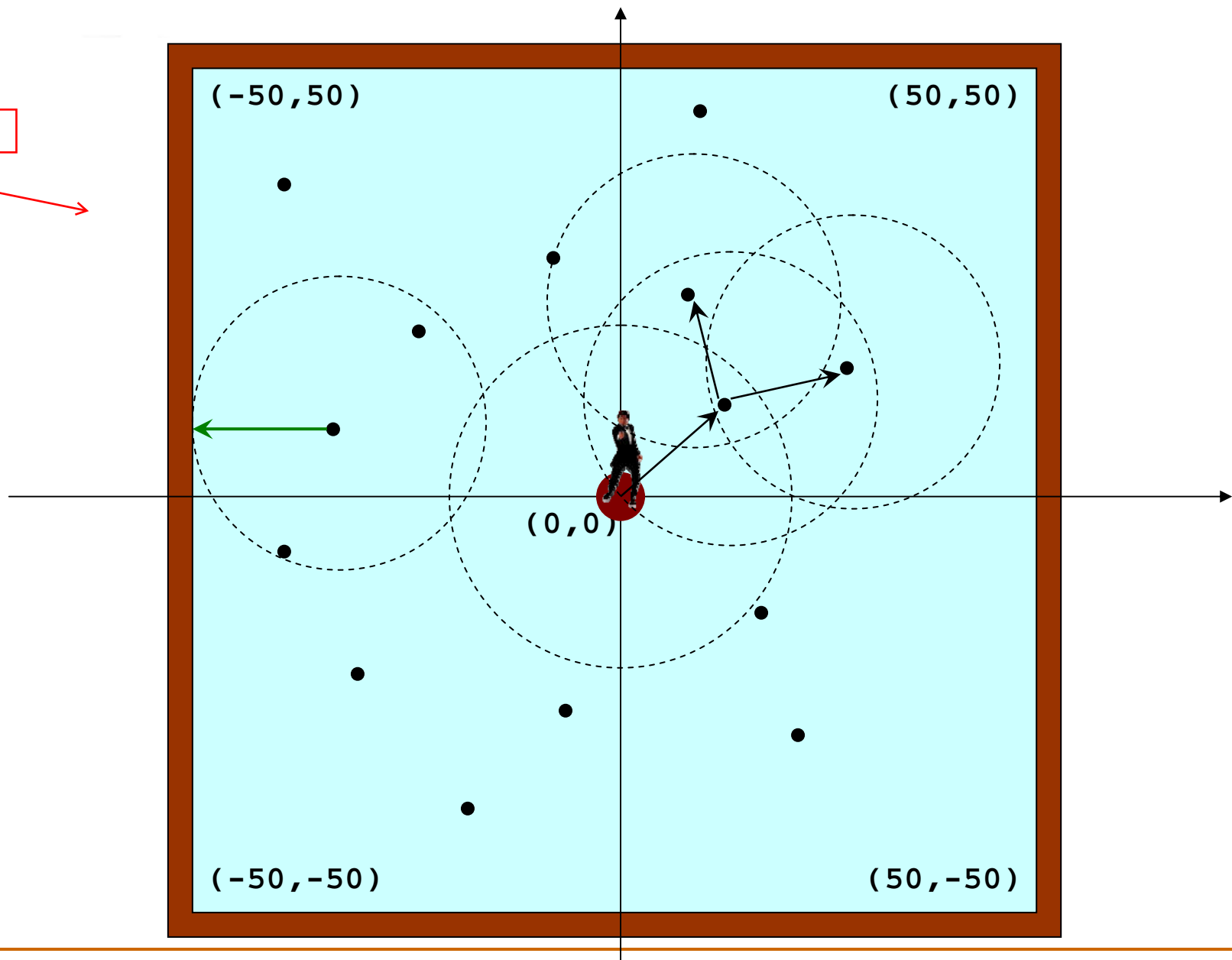
浙江大学 陈 越

6.3 应用实例：拯救 *007*





DFS



总体算法

```
void ListComponents ( Graph G )
{ for ( each V in G )
    if ( !visited[V] ) {
        DFS( V );
    }
}
```

```
void Save007 ( Graph G )
{ for ( each V in G ) {
    if (!visited[V] && FirstJump(V)) {
        answer = DFS( V );
        if (answer==YES) break;
    }
}
if (answer==YES) output("Yes");
else output("No");
}
```

DFS算法

```
void DFS ( Vertex V )
{ visited[V] = true;
  for ( v 的每个邻接点 w )
    if ( !visited[w] )
      DFS(w);
}
```

```
int DFS ( Vertex V )
{ visited[V] = true;
  if ( IsSafe(V) ) answer = YES;
  else {
    for ( each W in G )
      if ( !visited[W] && Jump(V,W) ) {
        answer = DFS(W);
        if ( answer==YES ) break;
      }
  }
  return answer;
}
```