

## HOMEWORK CLASS 8

### Third Extension Forest Fire code

```
if random 100 < probability [
  set pcolor red
  ;; if big-jumps is on, then sparks can fly farther
  if big-jumps? [
    let target patch-at ( west-wind-speed / 5 ) ( southwind-speed / 5 )
    if target != nobody and [pcolor] of target = green [
      ask target [set pcolor red ;; ignite the target patch
    ]
  ]
]
]
...

```

Modify the Third Extension Forest Fire\* go code so that:

1. Fire can jump to random locations blow by the wind
2. The code use Moore's neighborhood instead of Von Neuman's neighborhood
3. What changed concerning the 'tipping point' between 'live forest' and 'burned forest' after the modification in 2?
4. We have seen that the Fire Simple model is based on a theory known as percolation that explains how less dense substances are able to make progress through more dense substances. One particular case where this is both interesting and potentially profitable is oil percolation. How can you change the Fire Simple model\* to be a model of oil percolation?

\*Models Library/IABM Textbook/Chapter 3/Fire Extensions