



Eating the pudding

The surprising world of the Chameleons, with SLAPP

From an idea of Marco Lamieri, a project work with Riccardo Taormina

<http://eco83.econ.unito.it/terna/chameleons/chameleons.html>



The metaphorical models we use here is that of the **changing color chameleons**

We have chameleons of three colors: red, green and blue

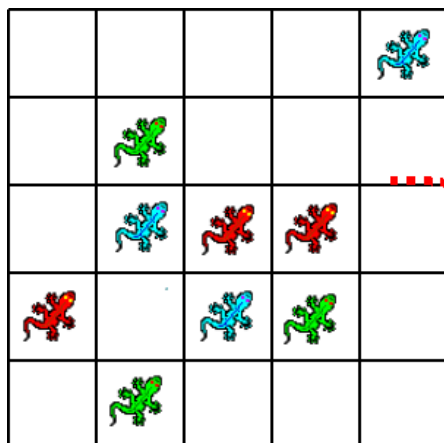
When two chameleons of different colors meet, they both change their color, assuming the third one (if all the chameleons get the same color, we have a steady state situation)

(The metaphor can also be interpreted in the following way: an agent diffusing innovation or ideas (or political ideas) can change itself via the interaction with other agents: as an example think about an academic scholar working in a completely isolated context or interacting with other scholars or with private entrepreneurs to apply the results of her work)



The simple model moves agents and changes their colors, when necessary

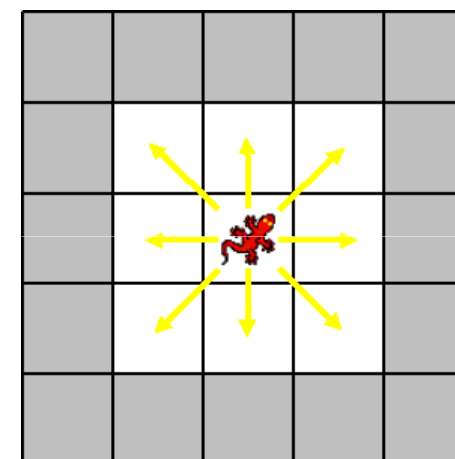
But what if the chameleons of a given color want to preserve their identity?



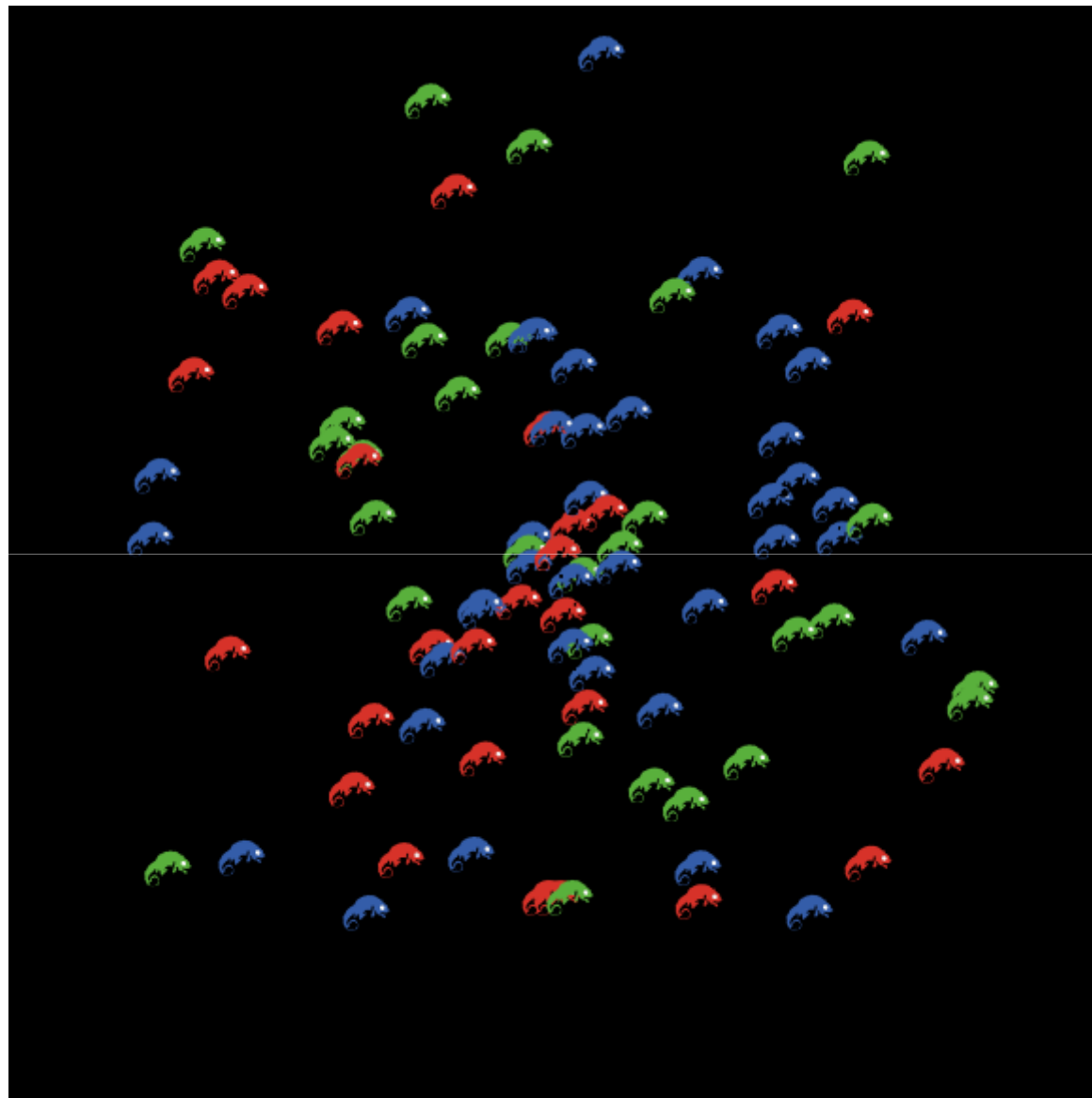
0	0	0	0	1
0	1	0	0	0
0	1	0	0	0
0	0	1	1	0
0	1	0	0	0

Preserving identity!

- **Reinforcement learning and pattern recognition, with bounded rationality**
- **Agent brain built upon 9 ANN**

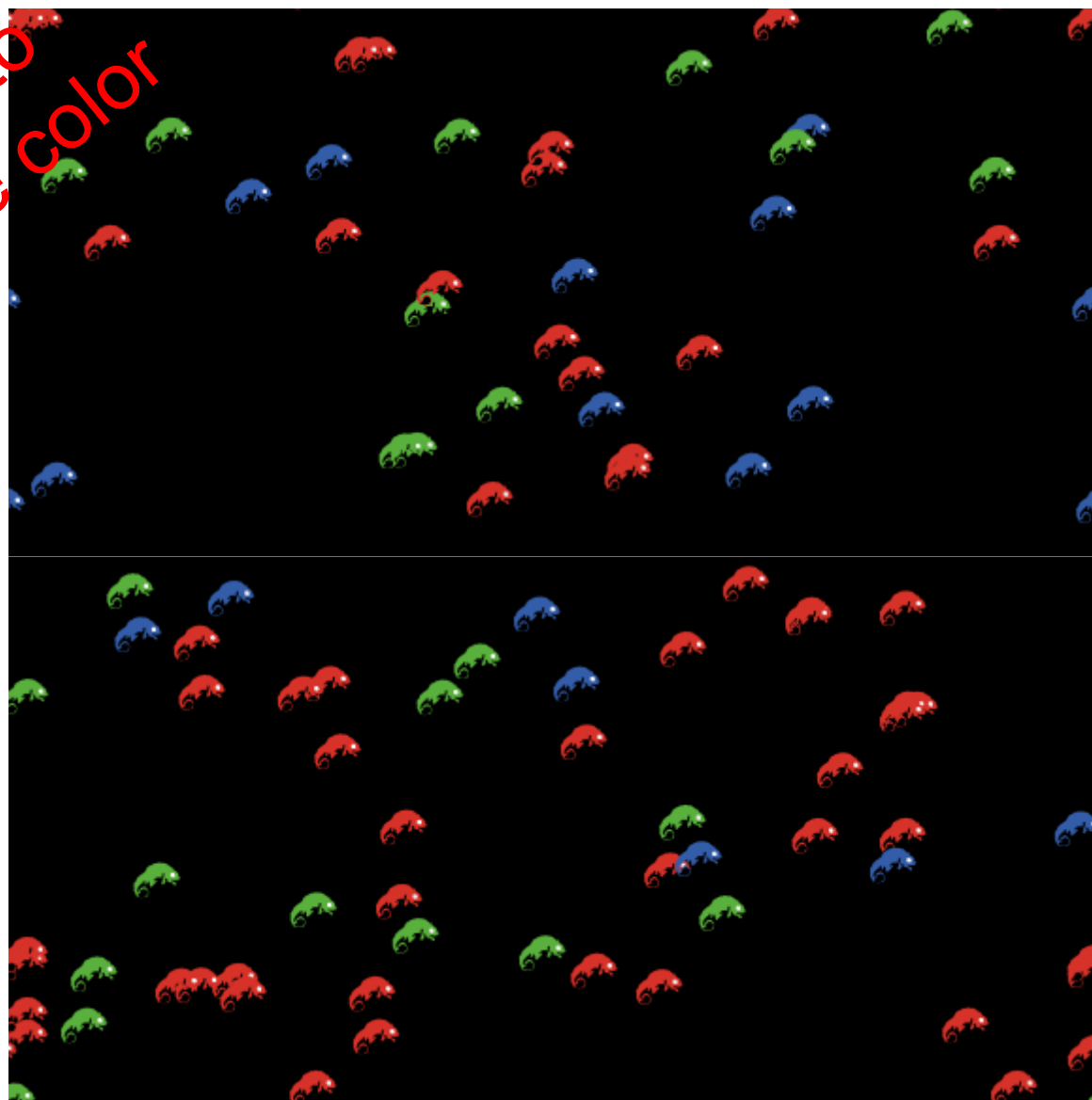


Random
moves



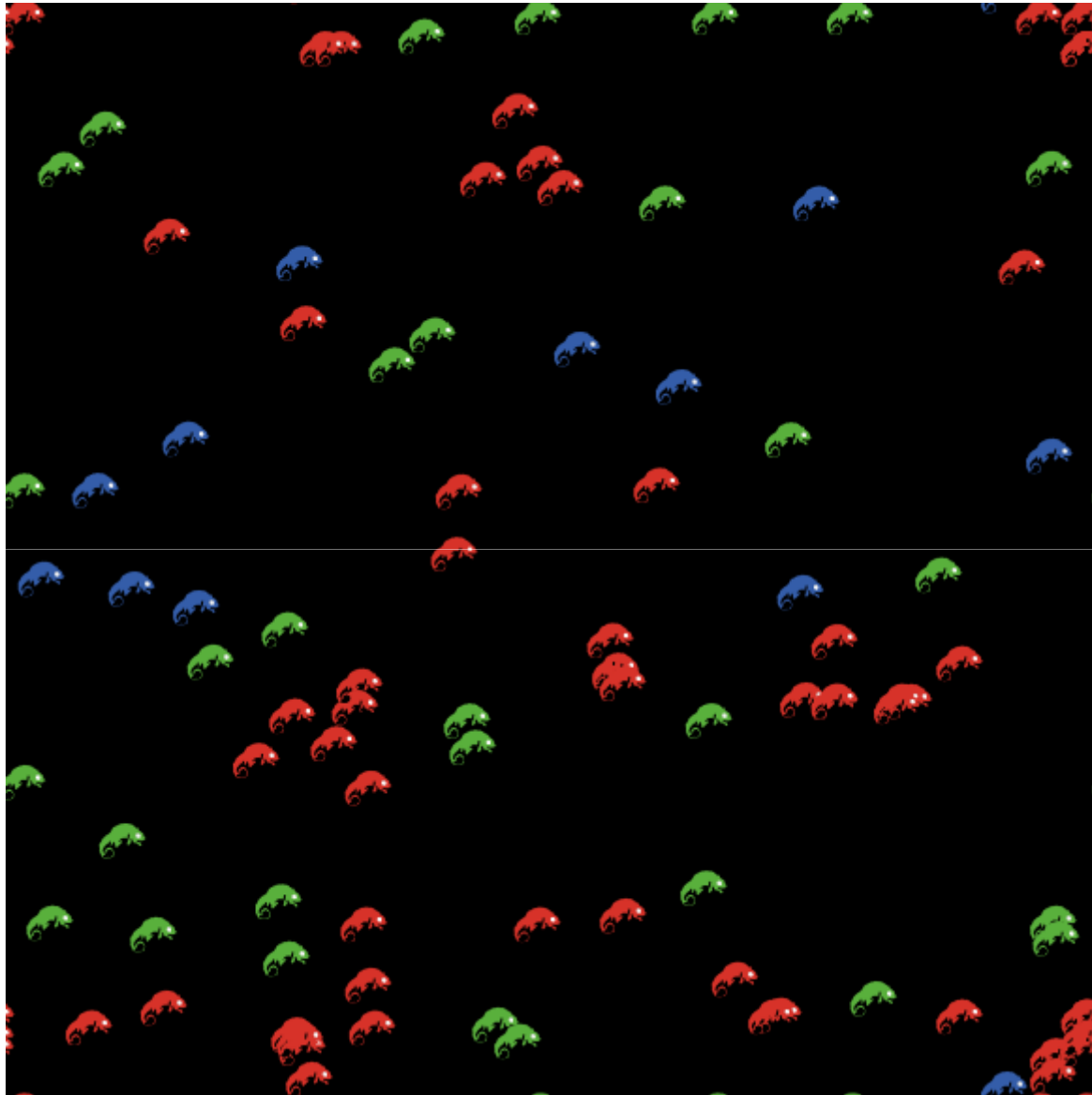


Red cham.
adverse to
change color





Green cham.
too





Blue cham.
chase the
other colors

