

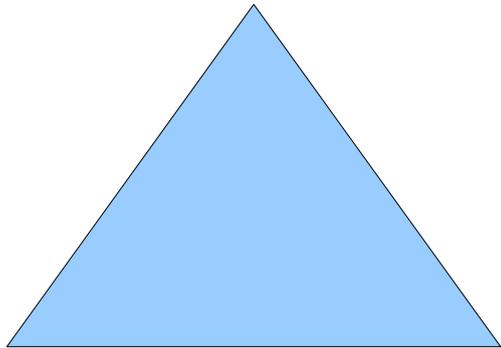
LTL-SAT est dans PSPACE

François Schwarzentruher
ENS Cachan – Antenne de Bretagne

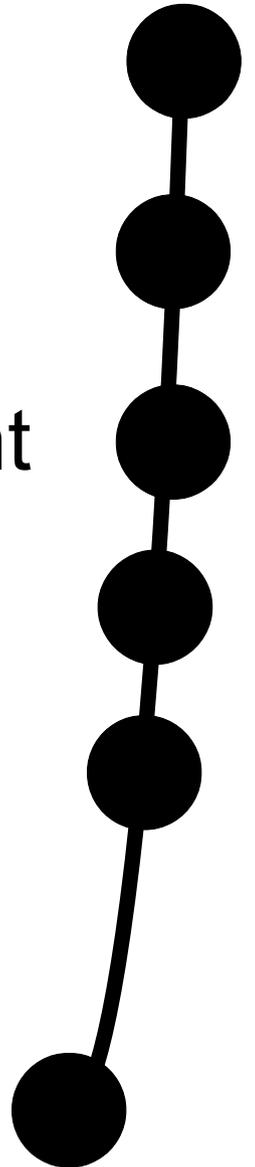
Sistla and Clarke. The complexity of Propositional
Linear Temporal Logics

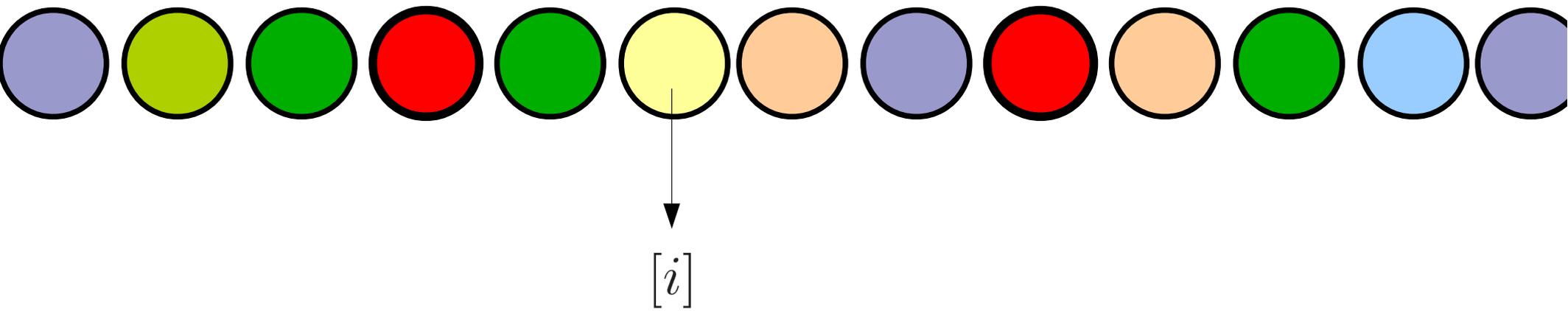
Comparaison S4 et LTL

- S4
- Profondeur polynomiale
- Branchement

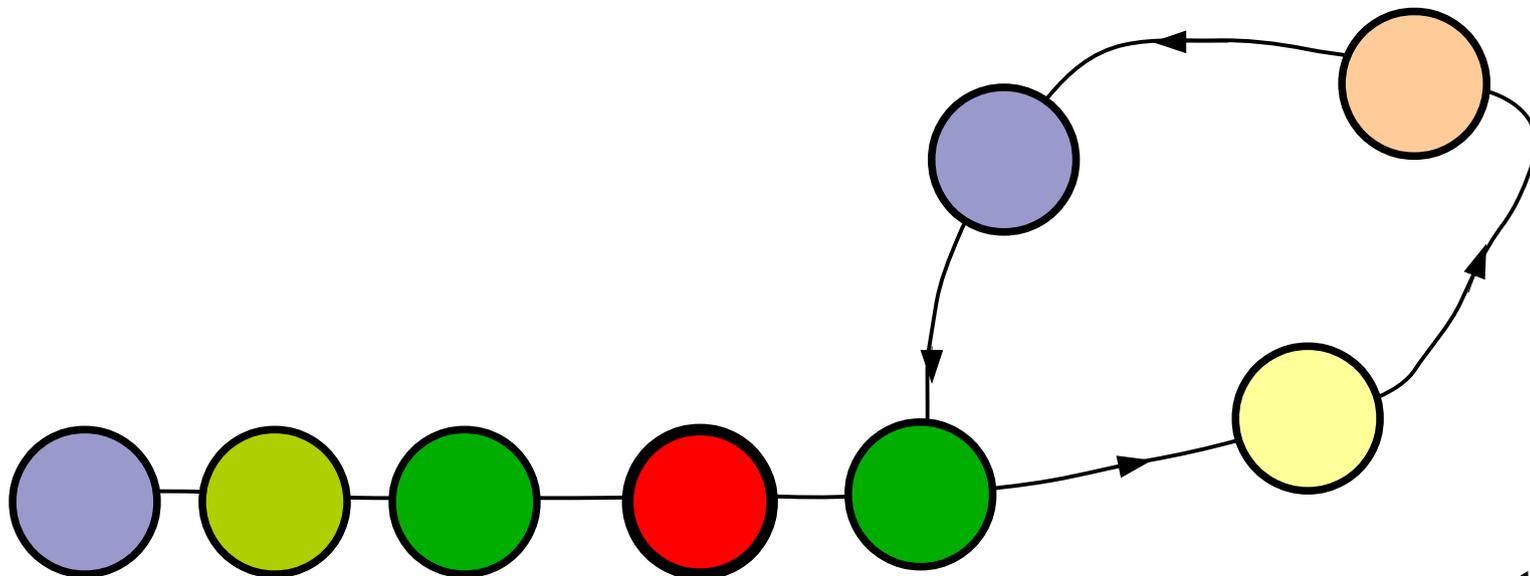
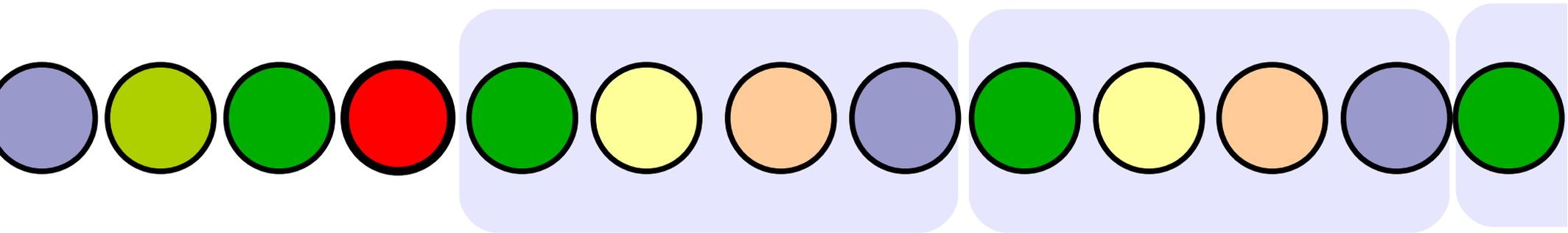


- LTL
- Profondeur exponentielle
- Pas de branchement





But : une exécution périodique à partir d'un certain rang (escargot)

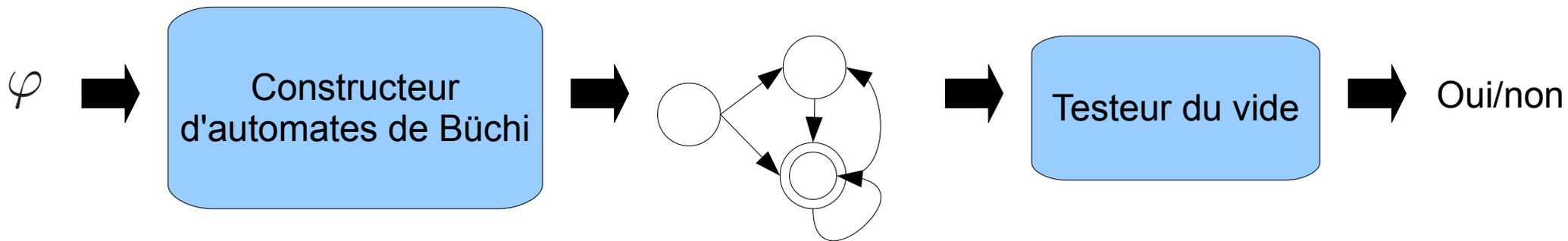


+petit escargot

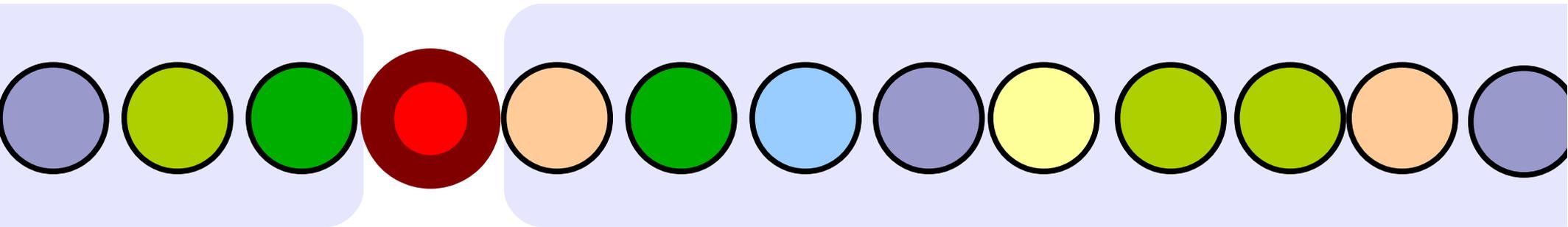
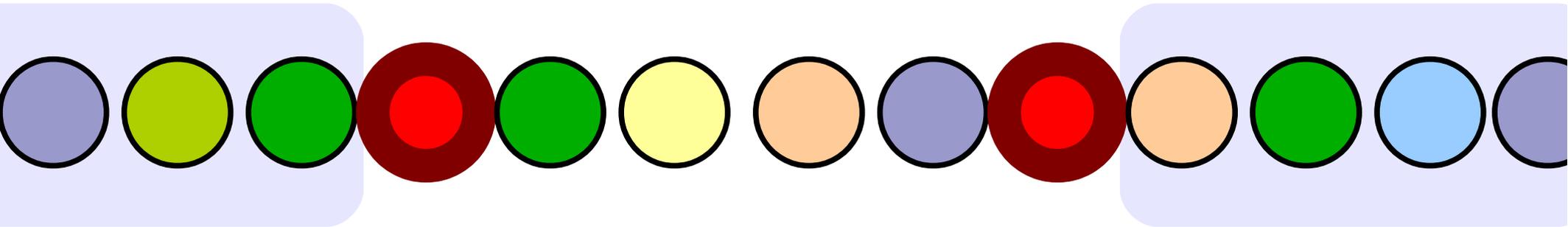
Régularité... automate...

Cours de Sophie Pinchinat : modélisation et vérification formelle par automates M1, semestre 2

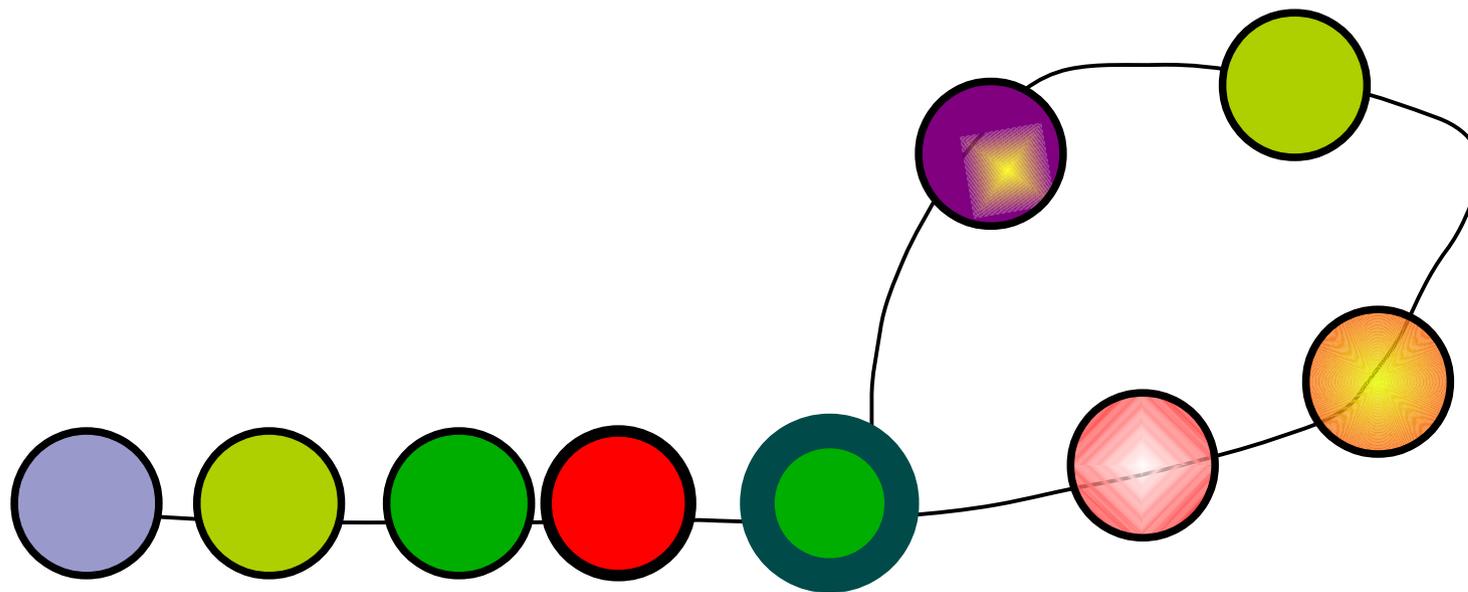
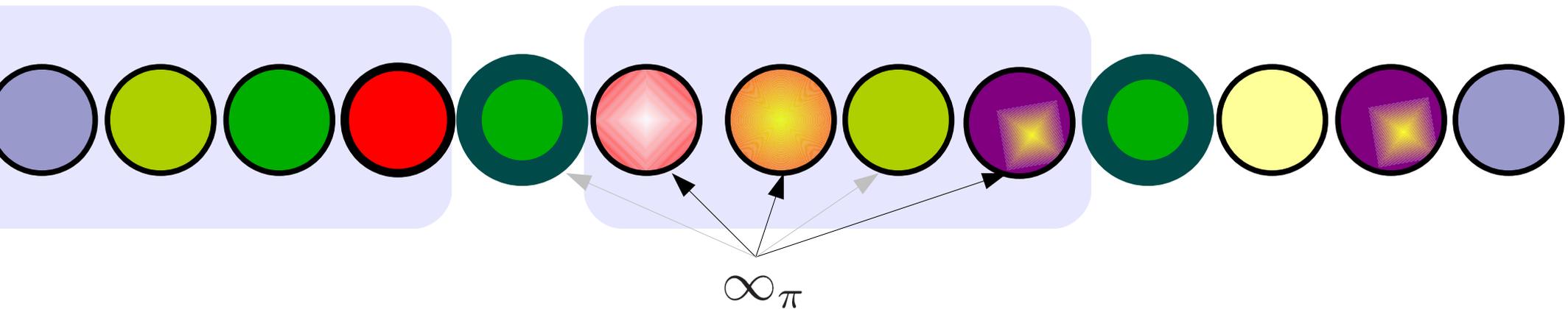
Principe pour résoudre SAT avec les automates de Büchi



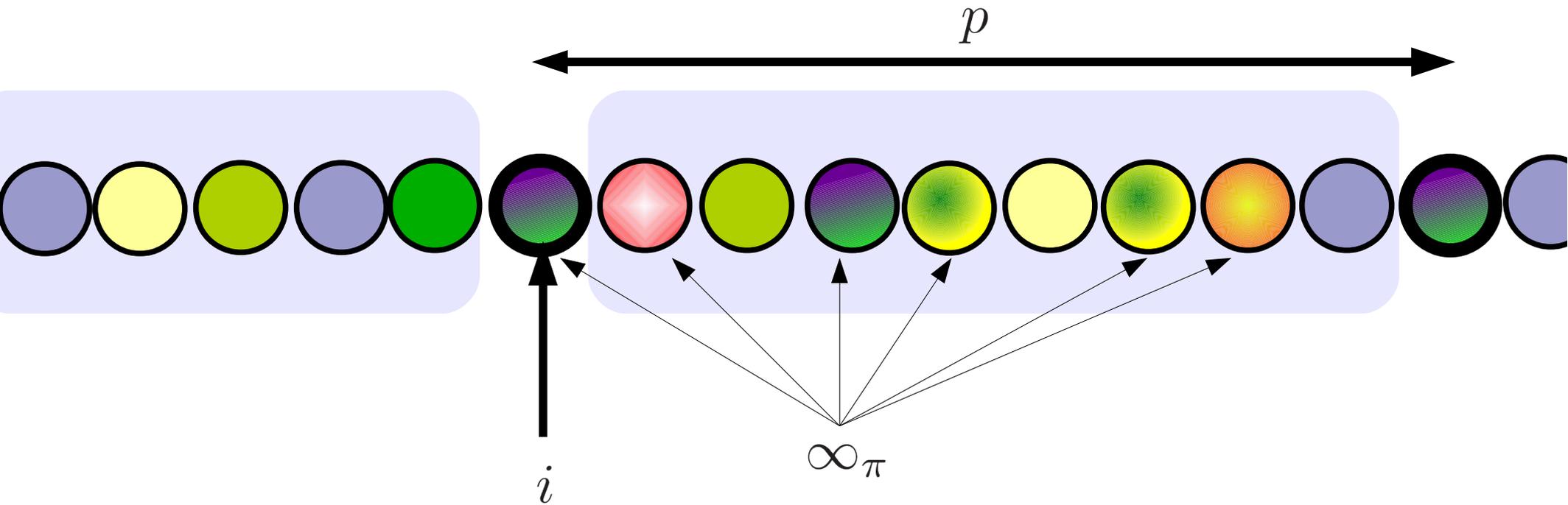
Raccourcir une exécution



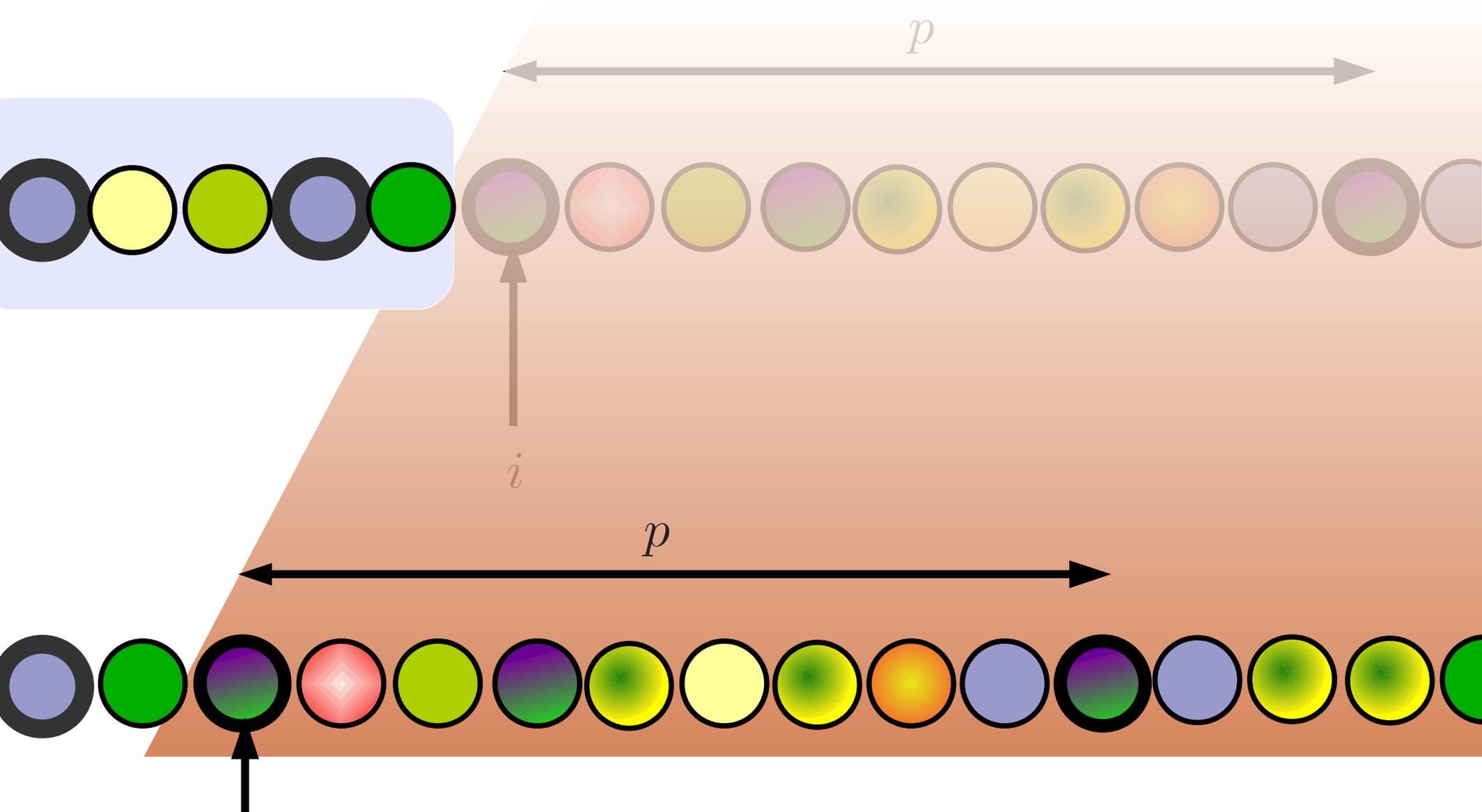
Transformation en escargot



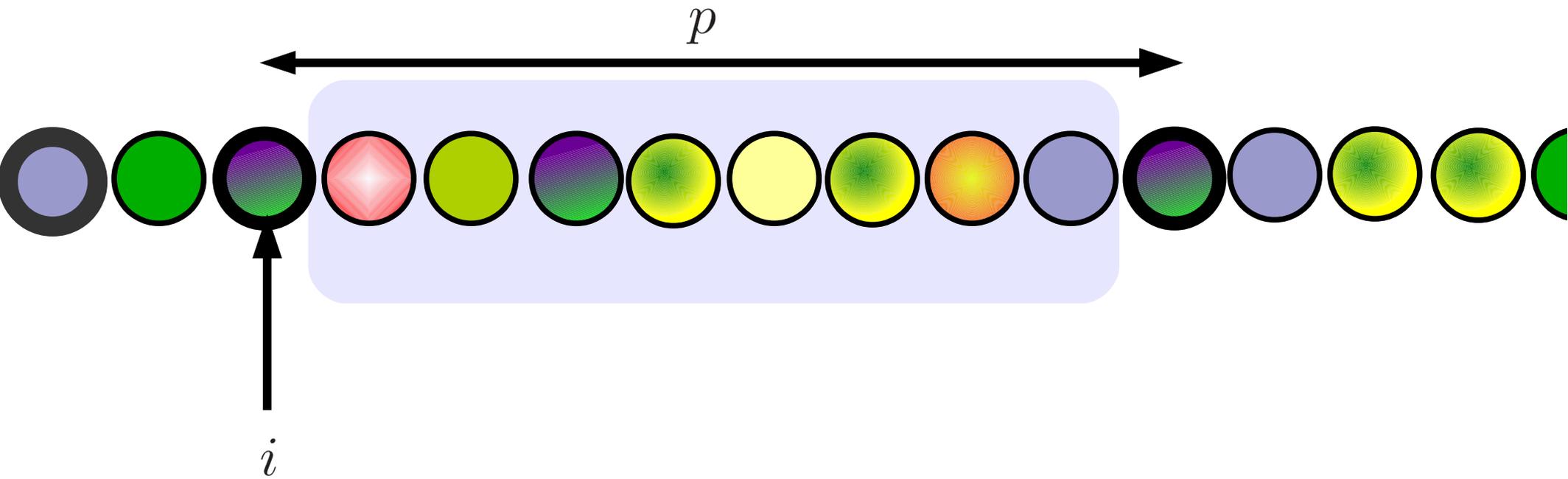
Trouver les bons endroits dans l'exécution



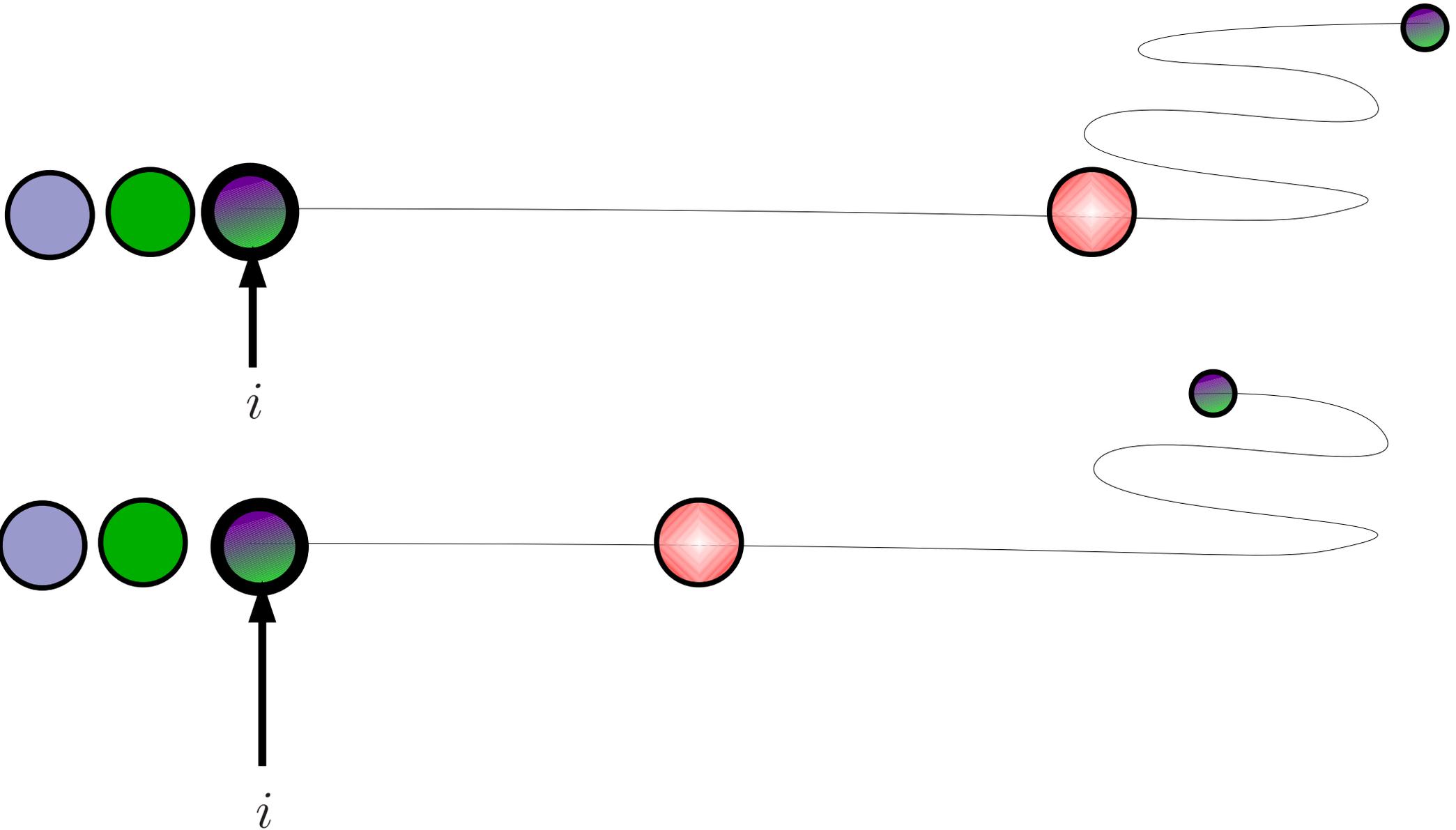
On raccourcit le début



On raccourcit la boucle



On raccourcit la boucle



On raccourcit la boucle

