

A microstructural approach for modeling compression effects of porous foams

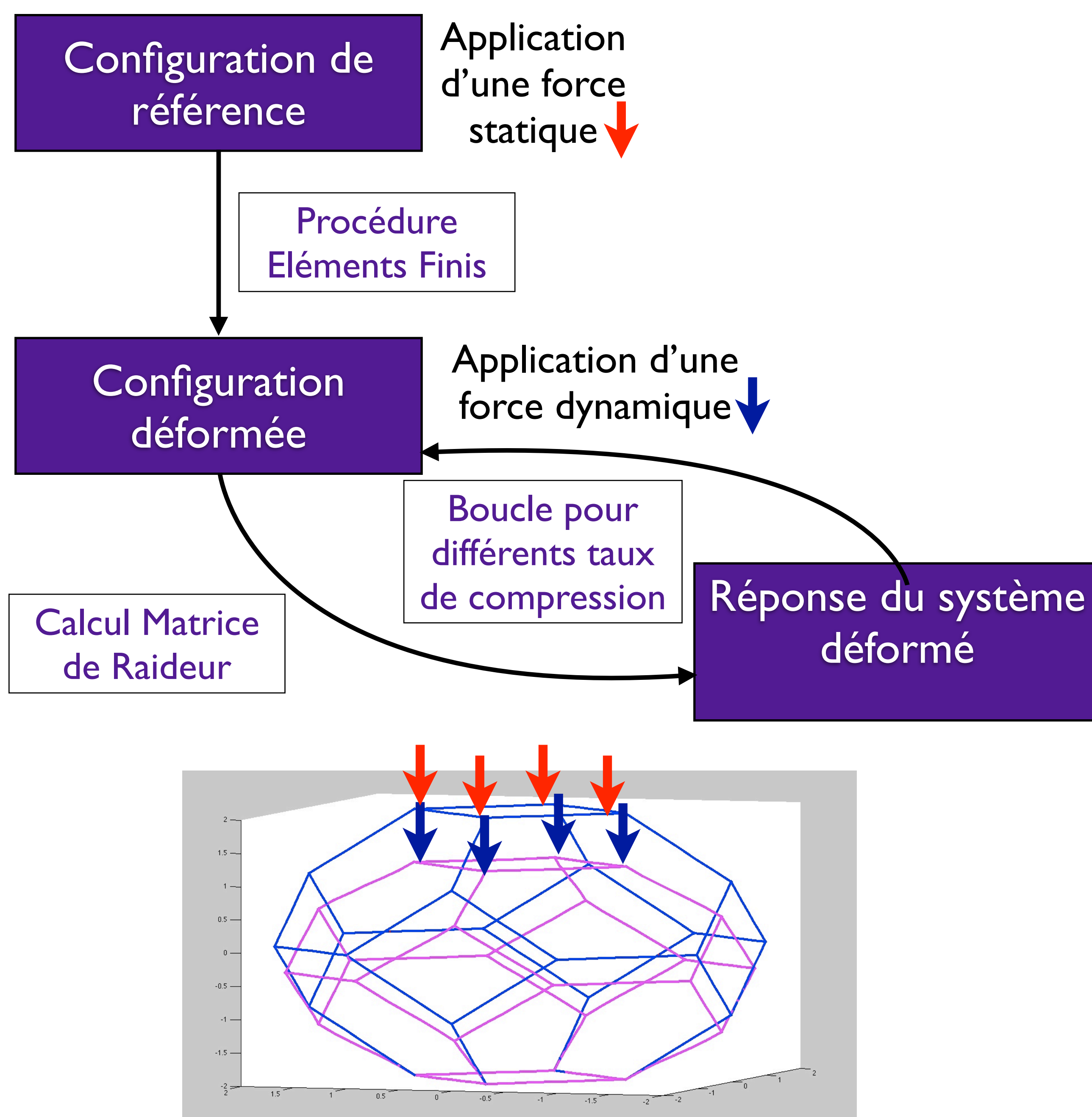
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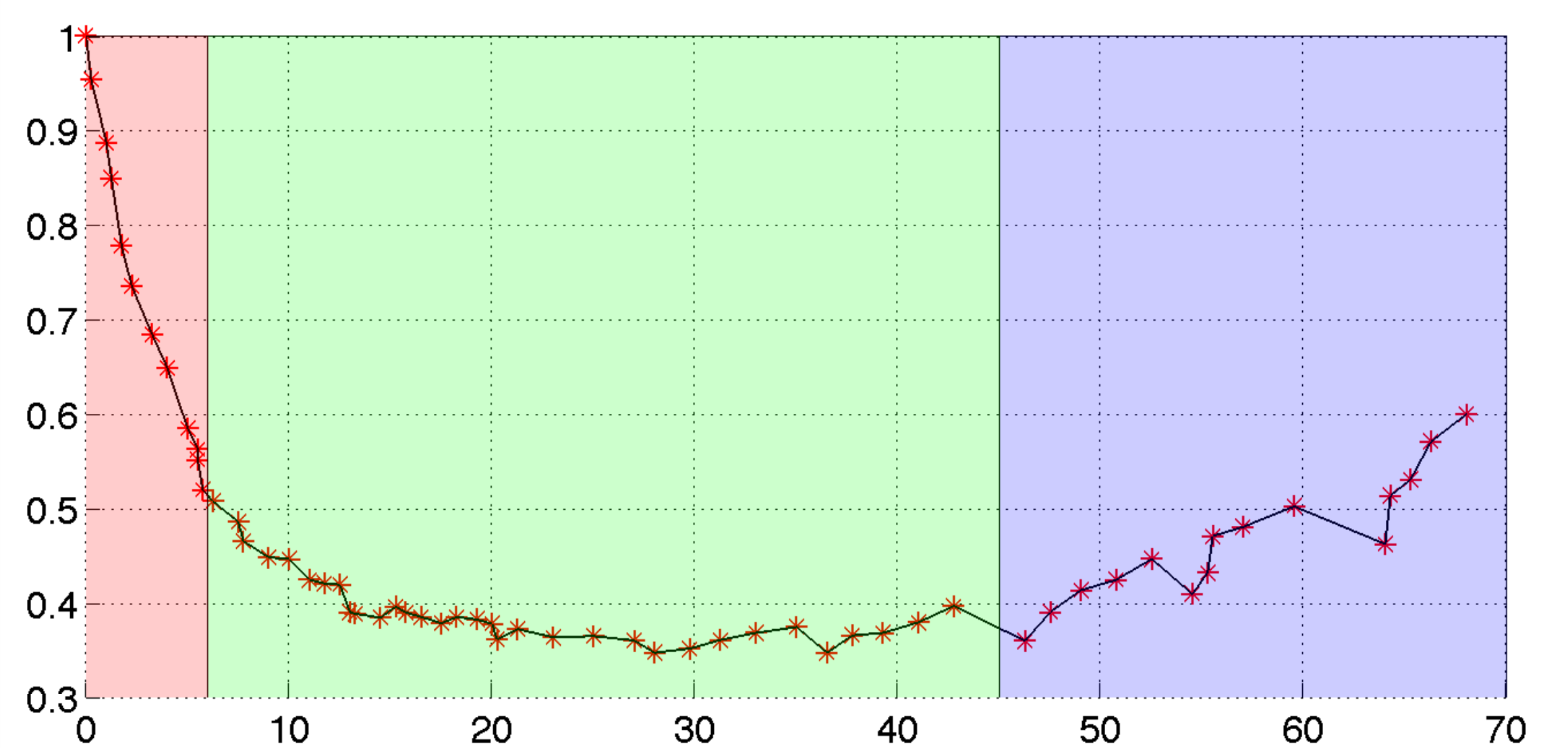
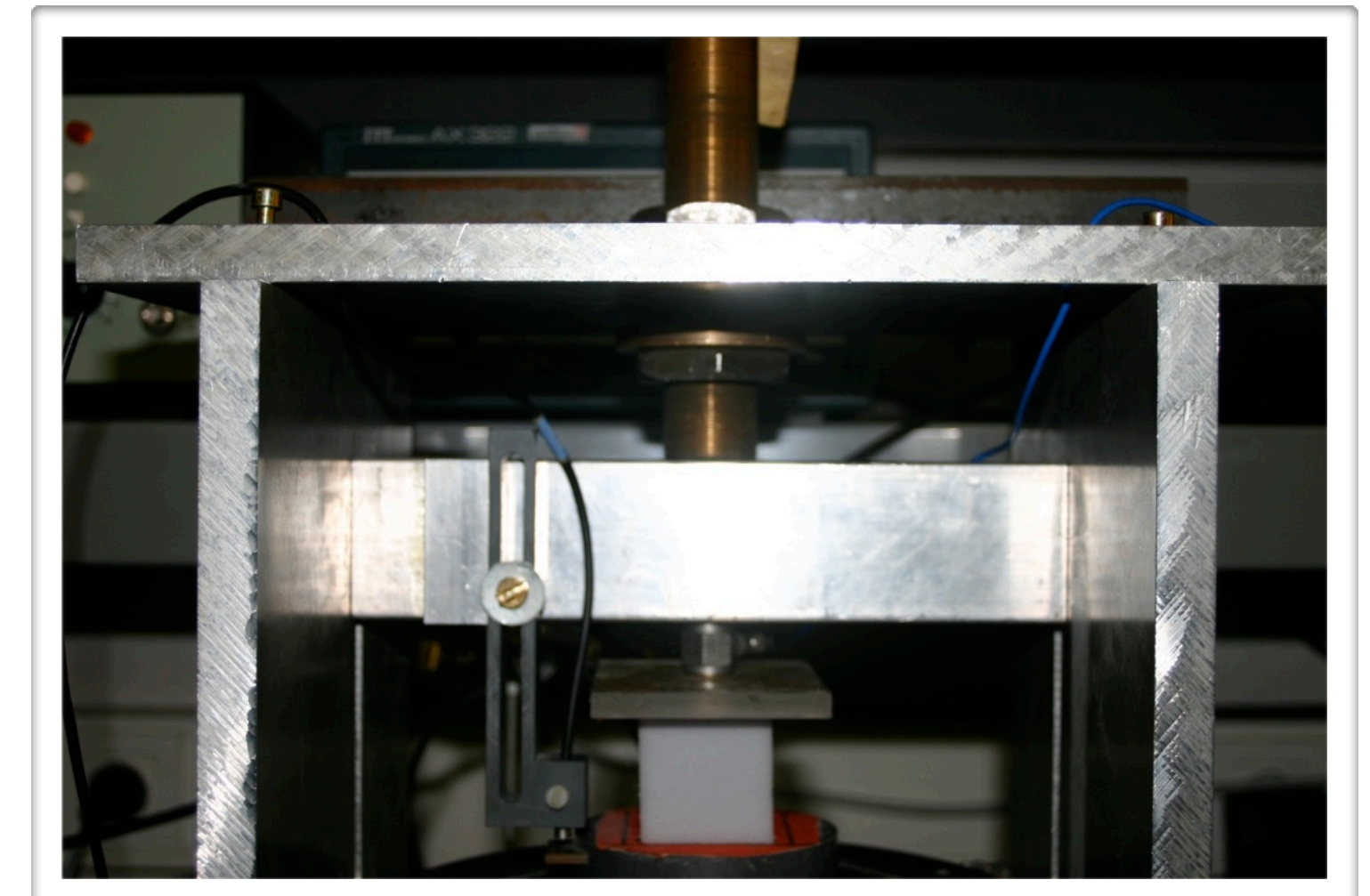
Objectives

- ✓ To propose an approach to understand bending effects of cellular foams
- ✓ Model mechanical properties of a unit cell

Methodology



Experimental results



- ✓ Use of linear and nonlinear (corotational formulation) FEM
- ✓ Periodisation of the unit cell in order to take neighbouring into account

Comparison and conclusion