## Reducibility Relations with applications in multidimensional symbolic dynamics

- I. What is computability?
  - 1. The Church-Turing thesis
  - 2. Reducibility relations
  - 3. Computability on sets of integers
  - 4. The Machinery of computability Berger and Robinson theorems
- II. Computability on other spaces
  - 1. Computability on real numbers The Hochman-Meyerovitch theorem
  - 2. Computability on Cantor sets The Hochman theorem
- III. Higman-type results
  - 1. Combinatorial group theory
  - 2. The Hochman theorem as a Higman-type theorem
  - 3. The Aubrun-Sablik theorem as a relativized Higman-type theorem
  - 4. An analogue of Thompson theorem in symbolic dynamics
- IV. Fixed-Point tile sets
  - 1. A simulation order on tilesets
  - 2. To understand recursion, you must first understand recursion
  - 3. The idea behind the fixed-point construction