Downhill Simplex Method (Nelder-Mead)

- **Reflection**: Project along the direction of decrease with size 1.
- **Reflection and expansion**: If decrease is large try a step of size 2.
- **Contraction**: Result of reflection is bad, so try a simple reduction within simplex.
- **Multiple contraction**: If result of contraction does not give a better result than lowest point.
- **Conclude**: volume of simplex becomes below tolerance.

---