

## Polytopes

## 1 Why

## 2 Definition

A polytope is the convex hull of a set if finitely many points.

An m-dimensional simplex is the convex hull of m+1 affinely independent points; an m-dimensional simplex is a polytope. The points are called the vertices of the simplex.

When m = 0, 1, 2, 3 the simplex is a point, closed line segment, trian-

