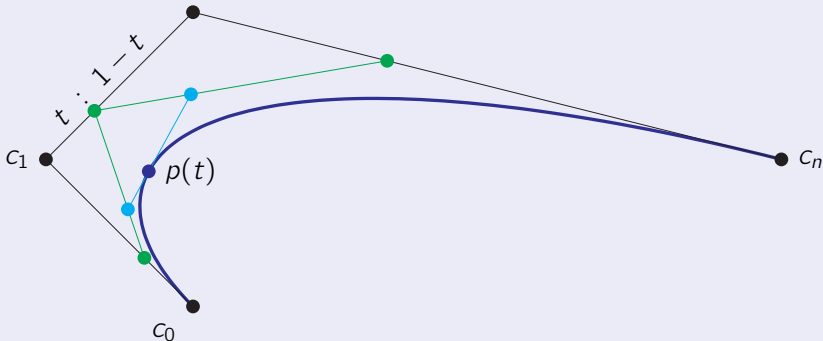


Algorithm of de Casteljau

A point

$$p(t) = \sum_{k=0}^n c_k b_k^n(t), \quad t \in [0, 1],$$

on a Bézier curve can be determined by successively subdividing the edges of the control polygon in the ratio $t : (1 - t)$.



As is apparent from the figure, the computations can be arranged in a triangular scheme. The point $p(t)$ is obtained in n steps, each forming convex combinations of adjacent control points:

$$p_k^m = (1 - t)p_k^{m-1} + tp_{k+1}^{m-1},$$

with $p_k^0 = c_k$ and $p_0^n = p(t)$.

