© 2005 Heldermann Verlag Journal for Geometry and Graphics 09 (2005) 067–075

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## **Blending curves**

Two arbitrarily given curves  $k_1(t)$  and  $k_2(t)$  are blended to a third curve b(t) so that b joins  $k_1$  and  $k_2$  in given points  $A_1$  and  $B_2$   $C^l$ - and  $C^m$ -continuously, respectively. In order to meet this objective we use polynomial functions  $\alpha_{lm}(t)$  for the blending process. The Casteljau algorithm for curves is used in a special way to build the blended curve b(t). Furthermore we can use our construction to generate interpolating spline curves.

Keywords: Spline curves, Hermite interpolation, interpolation.

**MSC**: 68U05