

Geometri

Oral Exam

To get mark 4 the student should be able to know the definitions or formulas for

- Affine map.
- The Casteljau algorithm.
- Bézie curve .
- Bernstein polynomial.
- Parameter transformations.
- Subdivision
- Difference operator.
- The derivative of Bézie curve .
- Degree elevation.
- Lagrange interpolation.
- Extrapolation.
- Spline Curves.
- Conditions C^1 and quadratic B-splines.
- Bézie surfaces.
- The tensor product approach and partial Derivatives.

To get mark 5 the student should be also able to prove the following theorems:

- Theorem 19 (The derivative of Bézie curve),
- Theorem 23 (Degree elevation),
- Theorem 26 (Lagrange interpolation).