

Curvature of a Barycentric Curve and Applications to Trajectories of Rational Bézier Curves

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The plan of the talk includes the following sections:

- 1. On the barycentric analytic geometry.** Here we accent on the basics of the barycentric analytic geometry and some binary point operations described in barycentrics – the standard barycentric multiplication and the point-matrix multiplication.
- 2. Barycentric orbits of some remarkable points in the triangle.** We apply introduced binary point operations to define the notion of corresponding orbits of a point and we give some examples concerning some remarkable points in the triangle.
- 3. Barycentric curves and their curvatures.** We concretize basic facts of differential geometry of plain curves to the case of a curve given in barycentrics. We give a formula for the curvature of such a curve.
- 4. Rational Bézier curves and its barycentric trajectories.** As an application we consider familiar rational Bézier curves and its barycentric trajectories.

References

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