

Infinitesimal bending of knots and energy change

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ABSTRACT

We discuss the infinitesimal bending of curves and knots in \mathcal{R}^3 . A brief overview of the results on the infinitesimal bending of curves is outlined. Change of the Willmore energy, as well as of the Möbius energy under infinitesimal bending of knots is considered. Our visualization tool devoted to visual representation of infinitesimal bending of knots is presented.

Keywords: Infinitesimal bending; variation; knot; Willmore energy; Möbius energy; OpenGL; C++.

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