



# YMC 2006



## Young Mathematicians Conference 2006

*August 4<sup>th</sup>-6<sup>th</sup> at The Ohio State University.*

### ON THE PERTURBATION OF POLYNOMIAL KNOTS

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**Abstract of Report Talk:** A polynomial knot is a polynomial embedding from  $\mathbb{R}$  to  $\mathbb{R}^3$ . We present a result that allows one to increase the degree of a polynomial knot while preserving the knot's topological type. Many interesting consequences follow from this theorem, including the use of semigroup transformations to reduce the total degree of the knot. In our talk, we will prove this result and discuss its most important consequences.

[LE06163903]

[Joint work with Susan Durst, Katherine Toman, Matthew Wright]

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