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POLYNOMIAL PARAMETERIZATIONS OF KNOTS

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Abstract of Report Talk: Knot theory is an increasingly important field of mathematics, with applications in biology, chemistry, and physics. It is also an exciting subject for mathematical research, with many unanswered questions to explore. In particular, mathematicians have recently taken interest in the study of polynomial representations of topological knots. Three-dimensional polynomial parameterizations of knots give us the opportunity to look at knots algebraically as well as topologically. This raises many new unexamined questions, such as minimal polynomial degree, algebraic manipulation of knots, and the spaces of polynomial knots. [DS06163011]

[Joint work with Emily List, Charles Siegel, Matthew Wright]

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