

Geometric Analysis of the Landau–Lifshitz Equation in Minkowski Space

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This study investigates the geometry of curves in Minkowski space using anholonomic coordinates. Degenerate surfaces generated along these curves are analyzed through binormal and normal congruences under specific conditions, which provide necessary and sufficient criteria for the existence of one-parameter surface families. Finally, the construction of curve evolution is established via the integrable Landau–Lifshitz equation, revealing its geometric significance.