

Abstract Submitted
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**Study of Complete Elliptic Integrals with a goal of Improving
Computation of Axisymmetric Fields** JOSEPH W. RUDMIN, Physics Dept.
James Madison Univ — In recent years I have been investigating the Complete
Elliptic Integral of the First Kind, K , with a goal of finding a rapidly convergent
power series R such that K can be written in terms R with the non-analyticities
subtracted off or divided out. The singularities in K are logarithmic in nature, so
that power series expressions of K converge slowly. Progress in this study will be
presented.

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