

REVIEW REPORT: SAIP CONFERENCE PROCEEDINGS

ABSTRACT ID:							
TITLE OF PAPER:	The relativistic length transformation: more than a Lorentz contraction						
AUTHORS:	R E Kroon						
ASPECT	BEST	5	4	3	2	1	WORST
Scope	Relevant		x				Irrelevant
Organisation	Excellent		x				Poor
Clarity	High		x				Low
Length	Too Short			x			Too Long
References	Adequate		x				Incomplete
Correctness	Correct		x				Incorrect
Significance	High		x				Low
Originality	High		x				Low
Contribution	Significant		x				No New
Expression	Clearly		x				Vague
Grammar	Good		x				Poor

Technical and editorial comments are made directly on the manuscript (see attached): No

Recommendation

- a) **Accept: X**
- b) Accept with Correction (Minor Revision):
- c) Accept with Correction (Major Revision):
- d) Reject:

COMMENTS

This paper makes a substantial educational contribution as it critically unpacks the impact of Lorentz contraction on the relativistic length transformation. The physical interpretation of the length transformation as the missing link in the derivation of the relativistic transformation of the electric field of a moving parallel plate capacitor is clearly elucidated. This elucidation would serve to address conceptual hurdles and significantly demystify the derivation of the relativistic transformation of the electric field of a moving parallel plate capacitor for physics undergraduates. There is a critical need to fully describe the underlying key mathematical assumptions underpinning fundamental derivations in Physics particularly in Electrodynamics in order to ensure a meaningful conceptual grasp by physics undergraduates.