Townsend, Paul K.
An interacting conformal chiral 2-form electrodynamics in six dimensions. (English)
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Summary: The strong-field limit for the 2-form potential on an M5-brane yields a conformal chiral 2-form electrodynamics in six dimensions, with gauge-invariant self-interactions but no adjustable coupling constant; the stress tensor is that of a null fluid. Lorentz invariance can be made manifest via an interpretation as a tensionless ‘space-filling M5-brane’, or as a truncation of the infrared dynamics of an M5-brane in $AdS_7 \times S^4$.

MSC:
81T30 String and superstring theories; other extended objects (e.g., branes) in quantum field theory
78A25 Electromagnetic theory (general)

Keywords:
p-form electrodynamics; chiral; M5-brane; mathematical physics; string theory; gauge theory

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