Contribution ID: **84** Type: **Poster**

Covariant Lagrangians for interacting (chiral) p-forms

A simple Lorentz-covariant formulation for abelian self-interacting p-forms is derived. This includes a democratic formulation of non-linear electrodynamics (featuring both electric and magnetic potentials) and its p-form generalizations, as well as interacting self-dual p=2k-forms in d=4k+2 dimensional Minkowski space. In particular, an explicit covariant Lagrangians for all SO(2)-duality invariant non-linear electrodynamics in four dimensions and all self-interacting self-dual two-form theories in six dimensions will be presented, as well as a simple covariant Lagrangian for type IIB SUGRA.

Author: MKRTCHYAN, Karapet

Co-authors: EVNIN, Oleg (Chulalongkorn University, Bangkok, Thailand); AVETISYAN, Zhirayr (Ghent University)

Presenter: MKRTCHYAN, Karapet

Session Classification: Reception & Poster session