Contribution ID: **141**   Type: **Oral**

Interacting p-form gauge theories: New developments

Thursday 22 August 2024 12:00 (30 minutes)

Gauge p-forms in diverse dimensions naturally occur in supergravity and string theory. This talk will review new formulations for interacting gauge p-form theories in $d = 2p + 2$ space-time dimensions. For odd p, such theories possess $U(1)$ duality invariance and include the Born-Infeld action as a well-known representative. For even p, each theory describes a self-interacting chiral boson with a self-dual field strength. In the four-dimensional case, an important example is a low-energy effective action for the $N = 4$ supersymmetric Yang-Mills theory on its Coulomb branch where the gauge group $SU(n)$ is spontaneously broken to $SU(n-1) \times U(1)$ and the dynamics is described by a single N = 2 this effective action will be briefly discussed.

Primary author: KUZENKO, Sergei

Presenter: KUZENKO, Sergei

Session Classification: Strongly-Coupled Theories and Dark Matter

Track Classification: G: Strongly-Coupled Theories and Dark Matter