Contribution ID: **24** Type: **Oral presentation**

Cartan's Supersymmetry and the Universe

Monday, 26 October 2015 15:42 (17 minutes)

Cartan has proposed a model of number systems given by octonions and a pair of 4 dimensional vector system.
Octonions contains 2 quaternions or a pair of Dirac particles
and by the transformation G_{23}, particle-antiparticle transformation occurs, and by the transformations G_{12},G_{123},G_{13} and G_{132}, supersymmetric transformation occur.
We extend the model to the system in which quark, leptons, gauge fields and Higgs particles are interacting, and the construct a picture of the universe.

Primary author: Dr FURUI, Sadataka (Graduate School of Science and Engineering, Teikyo University)

Presenter: Dr FURUI, Sadataka (Graduate School of Science and Engineering, Teikyo University)

Session Classification: Dark Matter

Track Classification: Dark matter: Physics and Cosmology