

# 26th International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY2018)



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## **N=1 superfield description of 6D SUGRA and its 4D effective theory**

*Thursday 26 July 2018 14:30 (20 minutes)*

We express 6D SUGRA in terms of 4D N=1 superfields. This description is useful when we consider extra-dimensional models and derive their 4D effective theories. We consider 6D SUGRA compactified on the sphere and the torus with 4D branes, and solve the superfield equations of motion under the assumption that the background preserves N=1 SUSY. Such N=1 description of the background solution enables a systematic derivation of 4D effective theory.

### **Parallel Session**

Formal Field Theory and Strings

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