

# Exploring U-topia

*Thursday 10 July 2025 11:00 (30 minutes)*

In this talk we will explore different topological charges of supergravity theories supported by a non-trivial U-duality bundle. In case these charges would be conserved, they would lead to global symmetries, which we believe to be absent in any consistent theory of quantum gravity. With the UV completions of string and M-theory at hand, we explore which kind of UV objects are necessary to break all global symmetries in the IR supergravity theory. This leads to interesting string backgrounds including higher-dimensional superconformal field theories, twisted compactifications, and non-geometric defects.

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