

## **SL(2,Z), commutators and bordisms between 9d type IIB supergravities**

*Tuesday 8 July 2025 14:24 (17 minutes)*

Using type IIB 9d gauged supergravities as an example, I will discuss how non-trivial topology plays a crucial role in bordisms to nothing or to other gauged supergravities, by allowing monodromies along its 1-cycles, which reduces the number of bordism defects that naively one would have needed. I will then explain how a property of the duality group, in this case  $SL(2,Z)$ , known as commutator width, restricts the general viability of this approach, in such a way that additional defects must be considered or the duality bundle enlarged.

**Presenter:** RUIZ, Ignacio

**Session Classification:** Parallel Session 1