

”The Trans-Carpathian Seminar on Geometry & Physics”

(See also the [Geometry & Physics @ DFT](#) seminar homepage)

Date: Wednesday, Oct. 30, 2024, 15:15 Bucharest time

Location: online via Zoom

Speaker: **Prof. Konrad Waldorf** (Universität Greifswald)

Title: **Buscher rules in general topology**

Abstract: The classical Buscher rules provide a local description of T-duality, focusing on how metrics and B-fields transform under duality. However, these rules do not capture the full picture when the underlying spaces have non-trivial topology. In contrast, topological T-duality explores these topological aspects but omits considerations of metrics and B-fields. In this talk, I will present a unified framework that reconciles these two perspectives by utilizing connections on bundle gerbes, which encode both geometric and topological information. This approach not only bridges the gap between local and topological descriptions of T-duality but also offers a common viewpoint that connects and extends the work of Bouwknegt–Evslin–Mathai, Kahle–Valentino, and Bunke–Schick.