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String Theory in Greater Paris

Rencontres Théoriciennes
"Supergravité, théorie des cordes et théorie M"

Jeudi 11 Avril 2024, 10:00

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CERN

Non-invertible symmetries, anomalies and scattering amplitudes.

We show that crossing symmetry of S-matrices is modified in certain theories with non-invertible symmetries or anomalies. Focusing on integrable flows to gapped phases in two dimensions, we find that S-matrices derived previously from the bootstrap approach are incompatible with non-invertible symmetries along the flow. We present consistent alternatives, which however violate standard crossing symmetry and obey modified rules dictated by fusion categories. Based on 2403.04835 with Christian Copetti and Shota Komatsu.

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