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## Monodromy defects and holography

*Wednesday, 15 May 2024 09:30 (1 hour)*

With an aim to further quantify non-perturbative defects in quantum field theory, we study two-dimensional magnetic defects in four dimensional SUSY quantum field theories which preserve a two-dimensional superconformal symmetry along the defect. These can be thought of as an infrared limit of a magnetic solenoid. On general grounds such magnetic defects support localized chiral edge states, and in our system we generically preserve a  $(0,2)$  supersymmetry. We compute various physical observables such induced currents rotating around the solenoid, as well as central charges of the defect, as a function of the monodromies. Time permitting, we also comment on the analogous case of one dimensional defects in three dimensional QFTs.

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