Cohomology, ∞-toposes and physics.

∞-toposes	define	non-abelian cohomology theories	describe	background fields	
cohesive ∞-toposes		differential cohomology		charge-quantized fluxes	[SS20a, Rem. 3.20] [FSS20c]
slice ∞-toposes		twisted cohomology		shifted charges	[SS20a, Rem. 2.94] [FSS19b] [FSS19c] [FSS20b] [SS20a]
singular ∞-toposes		equivariant cohomology		orbifolded charges (twisted sectors)	[SS20a, Rem. 5.4] [SS19][BSS19]
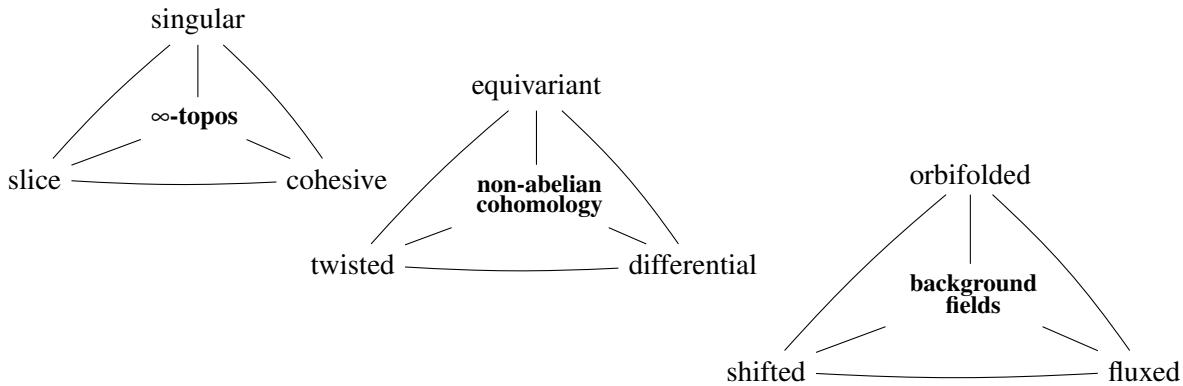
References

[BSS19] S. Burton, H. Sati, and U. Schreiber, *Lift of fractional D-brane charge to equivariant Cohomotopy theory*, Journal of Geometry & Physics, 2020 [`arXiv:1812.09679`].

[FSS19b] D. Fiorenza, H. Sati, and U. Schreiber, *Twisted Cohomotopy implies M-theory anomaly cancellation on 8-manifolds*, Comm. Math. Phys. **377** (2020), 1961-2025, [`arXiv:1904.10207`].

[FSS19c] D. Fiorenza, H. Sati and U. Schreiber, *Twisted Cohomotopy implies M5 WZ term level quantization*, [`arXiv:1906.07417`].

[FSS20b] D. Fiorenza, H. Sati, and U. Schreiber, *Twistorial Cohomotopy Implies Green-Schwarz anomaly cancellation*, [`arXiv:2008.08544`].

[FSS20c] D. Fiorenza, H. Sati, and U. Schreiber, *The character map in (twisted differential) non-abelian cohomology*, [arXiv:2009.11909]

[SS19] H. Sati and U. Schreiber, *Equivariant Cohomotopy implies orientifold tadpole cancellation*, J. Geom. Phys. **156** (2020) 103775, [`arXiv:1909.12277`].

[SS20a] H. Sati and U. Schreiber, *Twisted Cohomotopy implies M5-brane anomaly cancellation*, [`arXiv:2002.07737`].

[SS20b] H. Sati and U. Schreiber, *Proper Orbifold Cohomology*, [`arXiv:2008.01101`].