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## Derived equivalences from a duality of non-abelian GLSM's

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Joint work with Ed Segal. Producing examples of non-isomorphic varietes X and Y with equivalent derived categories is in general hard. A technique involving LG models and variation of GIT stability has recently proved to be a powerful way of obtaining such examples. Kentaro Hori has proposed an duality between different non-abelian gauged linear sigma models. One consequence of this duality is the equivalence of the category of B-branes associated with the dual GLSM's. We prove this predicted categorical equivalence. Combining this with the LG/VGIT techniques we can then find new examples of varieties X, Y, (geometrically described as linear sections of Pfaffian varieties) which have equivalent (or closely related) derived categories. Joint work with Ed Segal. For background, see e.g. Addington, Donovan, Segal [arXiv:1401.3661] and Hori [arXiv:1104.2853]

Summary

**Presenter:** RENNEMO, Jørgen (Oxford) **Session Classification:** Plenary session