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## Continuing the Saga of Fluffy Mirror Fermions

*Wednesday, July 27, 2016 10:00 AM (20 minutes)*

I discuss continuing work on a recent proposal for the nonperturbative regulator for chiral gauge theories which combines domain wall fermions and gradient flow, Phys.Rev.Lett. 116 (2016) 211602. Implementing chiral gauge theories on the lattice requires not only decoupling mirror fermions to allow for fermions in complex representations, but also a road to failure for theories with fermions in anomalous representations. Unlike attempts to gap the mirror fermion spectrum, this proposal gives the mirror fermions exponentially soft form factors, allowing them to decouple from ordinary matter except through nontrivial gauge field topology. I discuss progress on various open questions for this formulation that were left unresolved in the original work.

**Primary author:** Ms GRABOWSKA, Dorota (INT/UW)

**Presenter:** Ms GRABOWSKA, Dorota (INT/UW)

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