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Instability of transfer strength

We study the maximum achievable state transfer strength in a scenario where magnetic fields are applied to 3 nodes: the source and the target, as well as a third one. It turns out, this setup behaves in a more subtle way than the case when only the source and the target node receive magnetic fields (that will be described in some detail in Yujia Shi's talk). In particular, we are able to exhibit an instability phenomenon that is absent in the original case: changing the graph structure arbitrarily far from the source and target can lead to a significant increase in the maximum transfer strength.