

Abstract Submitted  
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**Topological field theory for 2+1 TRI TSC** YINGFEI GU, XIAOLIANG QI, Stanford Univ — Time-reversal invariant topological superconductors (TRI TSC) are gapped TRI superconductors with topologically robust gapless modes on the boundary. In the work by X. L. Qi et al, [PRB, 87, 134519(2013)], a topological field theory description was proposed for 3+1-dimensional TRI TSC, which contains an axionic coupling between superconducting phase and electromagnetic field. In my talk, I will describe a generalization of this theory to the 2+1 dimensional TRI TSC. The 2+1d topological field theory describes a topological coupling between electromagnetic field, superconducting phase fluctuation and magneto-electric polarization. I will also talk about the corresponding physical consequences.

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