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**Topological superfluids and insulators with time reversal symmetry**

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Topological insulators and superfluids with time reversal symmetry are new phases which have non trivial values of a topological invariant. Quite likely, the full physical significance of the topological invariant is yet to be understood. What is known is that these topological phases have robust edge/surface states. They can also support various interesting fractionalized defects. The different formulations of the invariant offer different perspectives on the physical significance. I report on recent progress in these areas.