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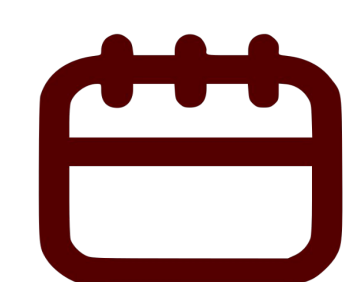
Çağlıyan Kurdak

University of Michigan



Emergence of Two- and One-Dimensional Conduction Paths Via Bulk Defects in Topological Insulators

It is well known that topological insulators have conducting surface states with unique properties. In some cases, these materials can also host conducting pathways via bulk defects such as twin boundaries and dislocations. Observing these conducting paths can be highly challenging due to the presence of other transport paths. In this talk, I will summarize our strategies to characterize conduction via defects in a variety of topological materials, such as $(\text{Bi}_{1-x}\text{Sbx})_2\text{Te}_3$, SmB_6 , and BiSb alloys.

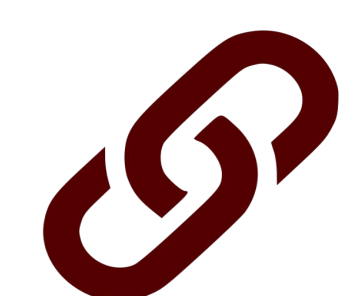


December, 03

Tuesday



19:00, (Ankara Time)



Click [here](#) for zoom link

Meeting ID: 432 931 6595

Password: 326852

Prof. Çağlıyan Kurdak received his B.S. degree in electrical engineering from Middle East Technical University in 1988, and his Ph.D. degree in electrical engineering from Princeton University in 1995. He joined the faculty at the University of Michigan in 1998, after working as a post-doctoral scientist at the Physics Department at the University of California, Berkeley. His current research interests include studying the electrical properties of low-dimensional electron systems and topological materials. He has also been the Director of the Applied Physics Program for the last 15 years.

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