TEMPLE UNIVERSITY

Department of Mathematics

Analysis Seminar

Room 617 Wachman Hall

Monday, October 30, 2017, 2:40 p.m.

The families index formula on stratified spaces

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Abstract: Stratified spaces arise naturally even when studying smooth objects, e.g., as algebraic varieties, orbit spaces of smooth group actions, and many moduli spaces. There has recently been a lot of activity developing analysis on these spaces and studying topological invariants such as the signature. I will report on joint work with Jesse Gell-Redman in which we study families of Dirac-type operators on stratified spaces and establish a formula for the Chern character of their index bundle.