THERESE LANDRY, University of California, Santa Barbara Spectral Triples for Noncommutative Solenoids

We construct odd finitely summable spectral triples based on length functions of bounded doubling on noncommutative solenoids. Our spectral triples induce a Leibniz Lip- norm on the state spaces of the noncommutative solenoids, giving them the structure of Leibniz quantum compact metric spaces. By applying methods of R. Floricel and A. Ghorbanpour, we also show that our odd spectral triples on noncommutative solenoids can be considered as direct limits of spectral triples on rotation algebras.