

E-MERGENCE OF THE SPECTRAL LOCALIZER

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The spectral localiser of Loring and Schulz-Baldes gives a method to compute the index pairing between an odd K-theory class and an odd spectral triple as the signature of a certain finite dimensional matrix. A spectral triple determines a natural asymptotic morphism, and thus an element in the E-theory of Connes-Higson. In this talk I will show how the spectral localiser emerges from computing the pairing of the K-theory class with this asymptotic morphism. This new proof sheds some light on the parameters appearing in the spectral localiser formula. Based on joint work in progress with my Ph.D. student Yuezhaoh Li.