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Multiplicativity and the JLO-cocycle

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A spectral triple (A, H, D) determines an index map from $K(A)$ to the integers. If the spectral triple is finitely summable, this index map can be represented by a cyclic cocycle. We look at the problem of finding index cocycles that are compatible with exterior product of spectral triples. We show that - the JLO cocycle can be perturbed to a multiplicative cocycle and - this cocycle can be localized if the spectral triple admits an analogue of a Euler vector field.