

CLASSICAL	Classical variables Differential forms Chern classes	Variation Infinite dimensional Functional Wiener
QUANTUM	Quantum geometry Fredholm operators Index Cyclic cohomology	Sub Correspondence Multiplicities Supersymmetries

	<i>Atiyah-Singer context</i>	<i>QFT context</i>
sheaf structure	functions on manifold \mathcal{V}	net (sheaf)
smooth structure	smooth functions	net of densities
differential operator	sheaf map	localized energy
elliptic operator	Fredholm operator	finite index
analytical index	Fredholm index	minimal dimensions
integrality	Fredholm index $\in \mathbb{Z}$	statistical mechanics
geometric index	associated with (D, \mathcal{V})	associated with
cohomology	De Rham	Roberts; cyclicity
deformation invariance	intrinsic	perturbations
Chern character	Chern character	KMS pairings
Hamiltonian	Laplacian	Killing Hamiltonians
grading	Dirac operator	supersymmetry
spectral formula	heat kernel	(super)-Gibbons-Hawking term