NIGEL HIGSON, Penn State University, University Park, Pennsylvania 16802, USA The residue cocycle of Connes and Moscovici

The index theorem of Connes and Moscovici provides a formula for Chern character in cyclic cohomology involving residues of zeta functions associated to elliptic operators. I shall give a streamlined account of the 'residue cocycle' discovered by Connes and Moscovici and the associated Fredholm index formula.