Atiyah covering index theorem for Riemannian foliations

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We use the symbol calculus developed in "A symbol calculus for foliations", J. Noncommut. Geo. **11** (2017) 1141-1194, to derive a cohomological formula for the Connes-Chern character of the Type II spectral triple given in "Transverse noncommutative geometry of foliations", arXiv:1804.06837. The same proof works for the Type I spectral triple of Connes-Moscovici. The cohomology classes of the two Connes-Chern characters induce the same map on the image of the maximal Baum-Connes map in K-theory, thereby proving an Atiyah L^2 covering index theorem.