In the table below, the serial numbers of A works are in black boldface, like 6 in the 1957 box (upright for mathematical papers) or like 10 for the 1966 box (italic for general papers; biographical items, like 14 in 1976, are displayed as 14). Joint papers with main collaborators are distinguished with the name and a colour code: Hirzebruch, Singer, Bott, Segal and Hitchin (Hodge, 1954 and 1955, has been displayed in superscript). Collaborations reduced to a single paper, like 26 with Toxo (1960), are distinguished like 26**, where the superscript code is explained at the bottom of the table. A case like 39** (1964) means that 39 is a paper with Bott and Shi-Sapir. The latter appears only once in CW: the colour of superscripts D, G, M and Su (Donelly, Gärding, Manton, Sutcliffe) indicates that they appear twice, and P (Patodi), that he appears four times (he may be ranked as one of the main collaborators). Finally, ||, ||, || and ||| mean transition to CW 2, 3, 4, 5 and 6, respectively.

### Hirzebruch


24 Riemann-Roch theorems for differentiable manifolds.

25 Quelques théorèmes de non-plongement pour les variétés differentiables.

27 Bott periodicity and the parallelizability of the spheres.

28 Vector bundles and homogeneous spaces.

36 Analytic cycles on complex manifolds.

37 The Riemann-Roch theorem for analytic embeddings.

### Singer

The most sustained collaboration, from 1963 to 1984: 15 papers, making about 345 pages; for 7 of these (about 175 pages) he is the only coauthor.

56 The index of elliptic operators on compact manifolds [cf. poster 2]

64, 66, 67, 68 The index of elliptic operators [≈ 135 pages; cf. Segal 65 below]

81, 82, 83 (w. Patodi) Spectral asymmetry and Riemannian geometry [≈ 145]

92 (w. Donelly) Geometry and analysis of Shimizu L-functions.

93 (w. Donelly) Eta invariants, signature defects of cusps and values of L-functions

120 Dirac operators coupled to vector potentials.

### Bott

The most productive collaboration, sustained in the period 1964-1983; 12 papers, making about 475 pages; for 8 of these (about 255 pages) he is the only coauthor.

39 (w. Shapiro) Clifford modules.

40 On the periodicity theorem for complex vector bundles.

57 The index problem for manifolds with boundary

62, 63 A Lefschetz fixed-point formula for elliptic complexes [≈ 75 pages]

79 (w. Patodi) On the heat equation and the index theorem.

85, 86 (w. Gárding) Locusus for hyperbolic differential operators with constant coefficients [≈ 140 pages]

105 The Yang-Mills equations over Riemann surfaces [≈ 90 pages]

109 The moment map and equivariant cohomology.

### Segal

4 papers, scattered from 1968 to 2004, making about 100 pages.

49 Equivariant K-theory and completion.

65 The index of elliptic operators [cf. Singer 64, 66, 67, 68 above]

173 Twisted K-theory

### Hitchin

6 papers, making about 340 pages; for 3 of these (about 150 pages) he is the only coauthor. Hitchin is the latest main collaboration, 1977-1988.

96 (w. Drinfeld and Manin) Construction of instantons.

[The celebrated Atiyah-Hitchin-Hirzebruch-Manin construction!]

97 (w. Singer) Self-duality in four dimensional Riemannian geometry.

126 Geometry and dynamics of magnetic monopoles [≈ 130 pages]