Recent notions of spectra for n-tuples of operators in Clifford Analysis

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Slice monogenic functions have a Cauchy integral formula whose kernel can be expressed in two different ways. One of the two expressions of the kernel allows to construct a functional for n-tuples of non necessarily commuting operators. This calculus, called S-functional calculus, is based on the notion of S-spectrum. In the case of commuting operators, it is possible to use the second expression of the kernel and to construct a functional calculus based on the notion of F-spectrum. The advantage of the F-spectrum is that it is easier to compute than the S-spectrum. The two notions of spectrum coincide in the case of commuting operators.

The talk is based on a joint work with I. Sabadini.