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How does chirality of the Standard Model arise?

Noncommutative geometry has proposed principles leading to interaction patterns close to the observed structure of the Standard Model of elementary particles, with its usual gauge group, but chirality is taken as an input. It turns out that an alternative framework, that of string-local quantum fields, enables one to deduce chirality of the electroweak sector from tree-level renormalizability at second order, on replacing gauge invariance by string independence.