

What Is Actually Proven, Level by Level — Against the 1984 Mechanism This Descends From

What is actually proven, at each level of the argument. The rows run from the structural theorem down to the specific model, and each cell records a status rather than a claim of superiority. The reading is mixed: the ten-dimensional structural theorem has been proved since 1984 and is not in question here, while the construction in this paper is younger and proves less at the model level. The table is here so that neither fact has to be inferred. Read with its surrounding assessment in Table 8, p. 106.

Level of proof	10D superstring	6D BI-6 / GG-6
Structural GS theorem	Proven (1984)	Proven (this paper)
Coefficient uniqueness	Proven (1/30 for $SO(32)$)	Proven (2/5 from OGN)
Rank-one / factorization	Implicit	Explicit (Thm. 5.1)
BRST / Slavnov–Taylor	Proven	Proven (Thm. 5.5)
Global gauge anomaly	Proven	Proven ($\pi_6 = 0$)
Explicit spectrum	Known (Type I / heterotic)	Benchmark constructed (Thm. 7.9)
Minimal spectrum	Known (SUSY fixes it)	Open (finite Diophantine search)
Gravitational completion	Automatic (SUGRA)	Explicit (SD tensors)
Charge lattice	String charge quantization	Abelian rescaling
Landscape / vacuum counting	$\sim 10^{500}$	Finite (bounded)