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A Minimal and Predictive Hybrid Seesaw Model for Majorana Neutrinos

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In the framework of the hybrid type-I + type-II seesaw mechanism, we propose a minimal and predictive texture for the Majorana neutrino mass matrix. The texture contains four free parameters that lead to intriguing correlations and yield several notable predictions, including the exclusion of the inverted hierarchy of neutrino masses, the determination of the octant of the atmospheric mixing angle, and constraints on the three CP-violating phases. Furthermore, the texture is embedded within the discrete symmetry group A_4 , together with the Standard Model gauge groups.

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