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Non-Holomorphic Modular $\mathcal{A}_4$ Symmetric Scotogenic Model

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The present talk will cover an extension of a scotogenic and its modular $\mathcal{A}_4$ variation a step forward and demonstrates scotogenic modular $\mathcal{A}_4$ non-supersymmetric realization. To achieve this non-holomorphic modular symmetries come to rescue. Advantage of the current construction is the compactness of the model content and absence of the supersymmetric fields. Neutrino mass is generated through a canonical scotogenic mechanism. The allowed values of the VEV of the τ modulus are $\tau \simeq w$ and $\mathrm{Im}[\tau] \approx 2$. The non-holomorphic modular $\mathcal{A}_4$ symmetry leads to correlations among the neutrino observables.

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