

Abstract Submitted
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Using the IRC Model to Calculate the Energy of the Flavorless Scalar Mesons ARAN STUBBS, Inframatter Research Center — The IRC model has multiple layers of structure. In it, the Scalar Mesons have a proto-quark and an anti-proto-quark orbiting above a pair of gravitons in s orbits, along with some proto-photons. Flavorless mesons have a proto-quark and an anti-proto-quark of corresponding flavors. The neutral pion has 2 configurations: a proto-up and a anti-proto-up along with 4 proto-photons; or a proto-down and a anti-proto-down along with 2 proto-photons. The total kinetic energy is P^* times the 1s energy, where P^* is the piece equivalent energy count. The Up form has $P^*=20$ with 4 filled s sub-shells, the down form has $P^*=12$ with 3 filled s sub-shells. The charged pion has a P^* of 18, with the proto-up in 2s and the proto-down in 3s orbits, along with 3 proto-photons. This allows a calculation of the rest energy of the proto-up, proto-down, and neutral pion from the charged pion of 17.95820(4), 37.77024(9), and 134.97659(34) MeV respectively. From the other flavorless scalar mesons, the rest energy of the proto-strange is 268.833(16) MeV and the proto-charm is 540.60(9) MeV. These correspond reasonably well to the bottom up calculation from the constituents of the proto-quarks.

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