

Flavor Phenomenology with Scalar Leptoquarks

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An attractive solution to the problem of B-anomalies is to combine two $O(1)$ TeV scalar leptoquarks in a coherent renormalizable scenario. We show that the combination of S3 and R2 leptoquarks provide such a framework that satisfies all of the low energy and high energy experimental constraints. Similarly, one can combine S1 and S3 leptoquarks but with more Yukawa couplings. The advantage of the later scenario, however, is that one can include right handed couplings to S1 leptoquark and fully accommodate the experimental value for the muon's $(g-2)$.

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