

COHERENT bounds on light mediator models

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I discuss the constraints on the parameters of several light boson mediator models obtained from the analysis of the current data of the COHERENT CEvNS experiment. Since the COHERENT CEvNS data are well-fitted with the cross section predicted by the Standard Model, the analysis of the data yields constraints for the mass and coupling of the new boson mediator in each model under consideration. These constraints are compared with the limits obtained in other experiments and with the values that could explain the muon $g-2$ anomaly.

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