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Template Composite Dark Matter : $SU(2)$ gauge theory with $N_f=2$

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We present a non perturbative study of $SU(2)$ gauge theory with two fundamental Dirac flavours. We discuss how the model can be used as a template for composite Dark Matter (DM). We estimate two types of interactions of the DM candidate with the Standard Model : the interaction through Higgs exchange and the interaction through photon exchange computing the electric polarizability of the DM candidate. Finally, we briefly discuss the viability of the model given the present experimental constraints.

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