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## A Flavorful Composite Higgs Model : Connecting B anomalies with the hierarchy problem

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Lack of new states at the TeV scale challenges all kinds of solutions to the hierarchy problem but the current B anomalies might be a new guidance. One possible solution to the neutral current B anomalies is a TeV-scale  $Z'$  boson of the broken  $U(1)_F$  gauged flavor symmetry, which might implies the connection between the two problems. In this talk, I will realize this idea based on a  $SU(4)/Sp(4)$  composite Higgs model. The symmetry breaking by the strong dynamics introduces the composite Higgs doublet as pseudo-Nambu-Goldstone bosons. At the same time, the  $U(1)_F$  gauged flavor symmetry as a subgroup of  $SU(4)$  is also broken by the strong dynamics, which introduced a  $Z'$  boson at the TeV scale as desired. The allowed parameter space to explain the B anomalies without violating other experimental constraints is probed. The UV origin of the  $U(1)_F$  flavor symmetry will also be discussed.

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