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Unified explanation of $b \rightarrow s\mu\mu$ anomalies, neutrino masses and $B \rightarrow \pi K$ puzzle. JOHN WAITE, ALAKABHA DATTA, University of Mississippi, DIVYA SACHDEVA, University of Delhi — Anomalies in semileptonic B decays could indicate new physics beyond the standard model (SM). There is an older puzzle in nonleptonic $B \rightarrow \pi K$ decays. The new particles, leptoquarks and diquarks, required to solve the semileptonic and the nonleptonic puzzles can also generate neutrino masses and mixing at loop level. We show that a consistent framework to explain the B anomalies and the neutrino masses is possible and we make predictions for certain rare nonleptonic B decays.

John Waite
University of Mississippi

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