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Vector boson excitations near deconfined quantum critical points YEJIN HUH, PHILIPP STRACK, SUBIR SACHDEV, Harvard University — We show that the Néel states of two-dimensional antiferromagnets have low energy vector boson excitations in the vicinity of deconfined quantum critical points. We compute the universal damping of these excitations arising from spin-wave emission. Detection of such a vector boson will demonstrate the existence of emergent topological gauge excitations in a quantum spin system.

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