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Electromagnetic response of a Weyl semimetal with coexisting density waves ZACHARY RAINES, VICTOR GALITSKI, Univ of Maryland-College Park — We consider a minimal model of a Weyl semimetal simultaneously perturbed by two different types of translation symmetry breaking order. The system exhibits a non-trivial electromagnetic response to such terms which can be obtained via Fujikawa's chiral rotation technique in the same way as the chiral anomaly. Such a response is similar to the usual topological term but with the translation symmetry breaking terms combining to act in the place of the magnetic field. We comment upon how the properties of this state might be observed experimentally.

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