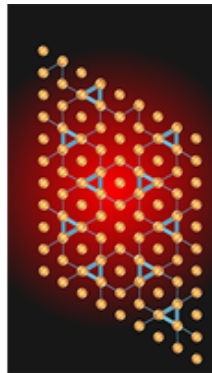


# Physical Review B

## Highlights



### EDITORS' SUGGESTION

## [Genesis and atomic structure of the charge density wave phase of 1T-VSe<sub>2</sub>](#)

V. Petkov, A. Zafar, M. Jakhar, and AM Milinda Abeykoon

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Charge density waves may be viewed as ordered quantum fluid of electrons that form a standing wave pattern, causing the electron charge density to become spatially modulated. Concurrently, the crystal lattice distorts, and the participating atoms arrange in a superstructure. Using variable-temperature total x-ray scattering, the authors determine here the unknown superstructure in the archetypal transition-metal dichalcogenides 1T-VSe<sub>2</sub>. Notably, V atoms are found to form an ordered pattern of triclusters that are uncommon to systems exhibiting charge density wave phenomena.

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