

Abstract Submitted  
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**Coexistence of Spin Density Wave and Superconducting States in Bechgaard Salts** JEREMY QUALLS, Sonoma State University — The electronic ground states of Bechgaard salts have been heavily studied since they were discovered over thirty years ago. These quasi-one dimensional organic conductors can display superconductivity, density waves, and metallic states. Many of these states are easily modified or revealed by the application of external magnetic field or hydrostatic pressure. Recent experiments by multiple investigators have begun to paint a picture of regimes where various states can coexist. Of great interest is how a spin density wave can be a precursor or competitor of the superconducting state.  $(\text{TMTSF})_2\text{ClO}_4$  and  $(\text{TMTSF})_2\text{PF}_6$  have been synthesized and investigated towards additional evidence to understand the coexistence of spin-density waves and superconductivity. A general picture will be painted, unifying data over the last twenty years showing a clear coexistence of multiple spin density waves and spin density waves with the superconducting state within these materials.

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