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Ground state properties of quasi-1D systems KENNETH GRA-HAM, University of Michigan, Physics Dept., SAMUEL MOUKOURI, University of Michigan, Physics Dept. and Center for Theoretical Physics — We use the two-step density-matrix renormalization group method to study the competition between an antiferromagnet and superconductivity. We find that in the absence of frustration the ground state is dominated by antiferromagnetic fluctuations. In the presence of frustration the antiferromagnetism is reduced but we don't find a significant pairing tendency.

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