

Abstract Submitted
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Pairing of doped holes in the Shastry-Sutherland lattice JUN LIU,
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University — We investigate the magnetic and pairing correlations in a hole doped
Shastry-Sutherland lattice. We use a variational wave function that reproduces
the valence bond ground state of the un-doped material, relevant to $\text{SrCu}_2(\text{BO}_3)_2$.
For finite doping we study the disappearance of the valence bond crystal and the
emergence of pairing of doped holes.

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