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Quantum Fidelity Susceptibilities of the Anisotropic Triangular Antiferromagnet: Conjugate Field Fidelity Susceptibilities MISCHA THESBERG, ERIK S. SORENSEN, McMaster University — The Heisenberg model of the Anisotropic Triangular Antiferromagnet (HATM) has seen a surge of interest owing to its relation to Cesium Copper Chloride, an inorganic salt with a potential spin-liquid phase. In this talk a new approach to quantum fidelity susceptibilities will be introduced and used to explore the phase diagram of the HATM. These fidelity susceptibilities are computable via exact diagonalization techniques and can be coupled to specific order parameters. We present results from such calculations shedding new light on the phase diagram of the Anisotropic Triangular Antiferromagnet.

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