

Abstract Submitted  
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**Discrete Quantum States and the Continuum Limit** JANG-YOUNG BANG, Grand Valley State University — We present a method of constructing a discrete quantum state by means of compactifying both configuration and momentum spaces. In particular, we present simple geometric descriptions of discrete quantum states that distinguish minimum uncertainty states from other states. Finally we show how minimum uncertainty states approach usual Gaussian wave packets in the continuum limit whereas non-minimum uncertainty states approach localized wave packets that do not saturate the uncertainty principle.

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