

**From:** [Scott Glancy](#)  
**To:** [Jordan, Stephen P \(Fed\)](#); [Knill, Emanuel H. \(Fed\)](#); [Liu, Yi-Kai \(Fed\)](#)  
**Subject:** Re: minimum uncertainty wavepackets  
**Date:** Tuesday, September 20, 2016 6:56:46 PM

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On 2016-Sep-20 16:20, Stephen Jordan wrote:

> Do any of you know whether gaussian wavepackets are the \*only\*  
> minimum-uncertainty wavefunctions?

Yes, they are. There is a nice little proof in my favorite quantum optics book: "Measuring The Quantum State of Light" by Ulf Leonhardt page 31. Leonhardt seems to credit Pauli in a book from 1933, but it is not clear how much of the proof is from Pauli and how much is new.

Scott