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Applying the PE analysis directly to the amplitude of the pulses and/or the timing between pulses can indicate whether there are any patterns that are more probable than others. The results reported here suggest that the pulses produced by an optically injected solid state laser (operated in a reasonably stable parameter space) have amplitude and temporal characteristics which are more predictable than the semiconductor laser based feedback systems studied.

Overall, this research shows how PE and WPE are good tools for identifying complex and pulsed outputs. This can assist to show where transitions from complex nonlinear outputs to more standard outputs such as mode-locked pulsed sequences may be being frustrated from occurring, or could occur with some additional control in the system.

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