

Abstract Submitted  
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**How much information do ultrafast spectra contain? The case for ultrafast quantum process tomography**<sup>1</sup> ALAN ASPURU-GUZI, Department of Chemistry and Chemical Biology, Harvard University — In this talk, I will describe the concept of quantum process tomography (QPT). The QPT protocol is a novel way of thinking about ultrafast spectra that allows to design families of experiments for extracting the quantum dynamical map of any system addressable by ultrafast spectroscopy. I will explain how QPT works, and also will describe our progress towards an experimental realization in collaboration with the group of Keith Nelson (MIT).

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