

Abstract for an Invited Paper  
for the MAR06 Meeting of  
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**Can Evolution Be Understood Quantitatively?<sup>1</sup>**

DANIEL S. FISHER, Harvard University

Although the underlying laws and mechanisms of biological evolution have been known for a long time, little is understood about the time scales of evolutionary processes. This talk will focus on quantitative questions about evolutionary dynamics and on the potential for progress on intermediate time-scale issues via combinations of microbial experiments and theory. A recent experiment on one of these will be presented. Some basic questions about long time-scale processes will also be raised, and potential roles of abstract models in sharpening these and advancing understanding addressed briefly.

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